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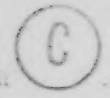
THE TREATMENT OF TENSION HEADACHES WITH A CHANGE MODEL OF PSYCHOTHERAPY

by

BARBARA LYNN PAULSON



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To Fred

ABSTRACT

The clinical problem of the tension headache is pervasive in our society. While traditional treatment has involved the use of pharmacotherapy, more recent innovations have seen the applications of learning theory and biofeedback in the alleviation of tension headaches. In this study the tension headache was assumed to be a symptom that arose from difficulties in dealing with life processes or from disruptions in the individual's interactional system.

The principles of the strategic psychotherapy used in other clinical problems were applied to treat tension headache sufferers. Ten participants who suffered from a minimum of twice-weekly tension headaches were selected for treatment using the interventions suggested by this approach. All participants maintained a baseline record of headache activity for two weeks. Five subjects were randomly assigned to receive treatment immediately, while the remaining five were required to wait thirteen weeks before commencing treatment. Data on headache activity for all subjects were collected at the conclusion of treatment. Individuals in the initial treatment group were also assessed on headache activity during a three month follow-up.

Of the eight subjects who completed treatment, six were assessed as successes and two as partial successes according to the evaluation criteria. The mean number of treatment sessions was six. As well as evaluating outcome with regard to the treatment model this study was

designed to demonstrate and describe strategies that enhanced the change process. These data were obtained via tape recordings of interviews that were transcribed and summarized. Verbatim reports of the interventions used are presented in the results. Interventions such as symptom prescription, restraining strategies and jamming strategies were used to interrupt existing behavioral patterns. Limitations of the model are also presented. The results of the study suggest that strategic interventions can be helpful in treating a psychosomatic disorder such as tension headache.

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CHAPTER I

INTRODUCTION

Overview of the Problem

Headache of one type or another is one of the most common ailments known to the human race. It is also a frequent symptom presented to the medical practitioner when a patient seeks treatment (Martin, 1983). Epidemiological studies indicate that about two-thirds of adults experience headaches and that 20-40% of these suffer from tension headaches (Beatty & Haynes, 1979; Cox, Freundlich & Meyer, 1975). In a recent survey of college students, Andrasik, Holroyd and Abell (1979) report that headaches occur more than once per week in fifty-two percent of the population. Methods of effective treatment warrant investigation in light of both the frequency and personal discomfort caused by the tension headache.

The specific causes of the tension headache remain uncertain. Both Wolfe (1963) and the Ad Hoc Committee on the Classification of Headache (Friedman, 1962) agree that the tension headache appears to be an individualized response to stress and is associated with sustained contractions of skeletal muscles in the scalp and shoulder regions. Dalessio (1972) stresses the interaction of personality traits, unconscious conflicts and secondary gain from chronic pain. Martin (1978) asserts that the tension headache sufferer experiences

an underlying anxiety that is translated into a physical symptom. As yet no single psychogenic factor can be implicated in the etiology of the tension headache (Sutherland, 1983).

The tension headache is usually treated with analgesic and muscle relaxant compounds which do little to help resolve the problem of reoccurrence. Ninety percent of all patients seeking medical help obtain these prescriptions despite their risks and undesirable side effects (Philips, 1976). Furthermore, medications foster psychological and in some cases physical dependence.

The traditional mind-body polarity in the study of human behavior has been slowly dissipating in recent years as the application of principles from the behavioral sciences to the treatment of psychosomatic and related stress disorders has flourished. Authorities in the treatment of tension headaches maintain that the greatest benefits are likely to result from teaching the headache sufferer to relax muscles in the neck and shoulder region (Budzynski, Stoyva, Alder & Mullaney, 1973; Epstein & Abel, 1977; Philips, 1977) or helping the headache sufferer learn to respond differently to stressful events in the environment (Wolfe , 1963; Holroyd & Andrasik, 1978).

Behaviorally oriented treatment methods are based on the belief that tension headaches are psychosomatic disorders, their occurrence being related to the individual's inability to deal with environmental stress (Beatty & Haynes, 1979; Holroyd, Andrasik &

Westbrook, 1977). While psychological factors are clearly suspect in the etiology of tension headaches, the relationship between environmental stress and headache symptoms is at best murky. Most experts in the field consider the tension headache an end state resulting from an individual's inability to handle the pressures of everyday life.

Purpose of the Study

A plethora of research studies have involved the treatment of the tension headache with techniques to reduce muscle tension, principally using biofeedback training (Budzynski, 1978; Haynes, Griffin, Mooney & Parise, 1975; Jessup, Neufeld & Merskey, 1979; Neuechterlein & Holroyd, 1980). Cognitive therapy has also been investigated to teach individuals to cope with self-defeating responses to stress (Holroyd & Andrasik, 1978). In contrast, relatively few studies have been directed toward the investigation of verbal psychotherapies. The results of these studies have generally demonstrated the ineffectiveness of conventional insight psychotherapy (Wieselberg-Bell, Abromowitz, Folkins, Spensley & Hutchinson, 1983).

The present investigation sought to examine the process of verbal psychotherapy using a change model with the clinical problem of the tension headache. The purposes of this research study were threefold:

1. To provide a therapeutic setting to observe the use of strategic interventions as suggested by the change model with the presenting problem of tension headache.
2. To describe interventions that promote or interfere with the disruption of problem-maintaining patterns in tension headache sufferers.
3. To explore issues relative to the treatment model which enhance or limit its effective use with tension headache clients.

The Treatment Model

A change therapy model offers a unique approach to symptom-oriented treatment. Clinical problems are conceptualized as aspects of ongoing interactional systems (Watzlawick & Coyne, 1980). Patterns of interaction rather than initial states determine treatment strategies. A basic assumption of this approach is that symptoms arise from difficulties in dealing with transitional life processes or disruptions in the person's interactional systems. "Symptoms appear when there is a dislocation or interruption in the unfolding life cycle of a family or other natural group" (Haley, 1973, p. 42).

Each individual is considered to be a self-regulating system, governing behaviors according to rules developed over time through a process of trial and error. The development of these rules determines which behaviors are allowable and which are not (Palazzoli, Boscolo, Cecchin & Prata, 1978). Erickson maintains that

symptoms appear when a person is in an impossible situation from which he or she is unable to escape (Haley, 1973). Pathology and symptomatic behavior are assumed to be maintained by repetitive interaction, and consequently rules peculiar to that particular person's presenting problem will be established. Certain behaviors will have characteristics which maintain the rules of the interactional pattern. Because symptomatic behavior occurs in the context of interactional patterns specific to individuals in relationships with others, the way to alleviate symptoms is to change the rules governing the solutions permissible in resolving the problem (Fisch, Weakland & Segal, 1982; Palazzoli et al., 1978; Watzlawick, Weakland & Fisch, 1974).

The initial task of therapy is to identify problem-maintaining behavioral patterns through interaction with the client. Strategic interventions are devised to disrupt problem-maintaining patterns of behavior or change the context of the behavior so as to alter its meaning to the client. If the behavior that maintains the problem is changed or eliminated, the problem will be resolved regardless of its origin, nature or duration (Watzlawick et al., 1974).

Traditional models of psychotherapy where causality is of primary importance seek to answer the question "Why?". Information is gathered in therapy with the view that when the person understands the appropriate thoughts, feelings or behavior, the power of reason can be used to promote change. When applying the change model to a clinical problem, the emphasis is on gathering information regarding

repetitive patterns of behavior that are ineffective attempted solutions to the problem. Something in the person's attempted "solutions"--the very ways the person is trying to alter the problem--is considered to contribute to its maintenance (Fisch et al., 1982).

Treatment involves attempts to influence the client to resolve the presenting problem satisfactorily. Planned interventions or strategies are the directives and the maneuvers in which the therapist engages to influence resolution of the problem. Practitioners of change principles have compiled a series of interventions such as reframing, symptom prescription, and restraining strategies which have been demonstrated to be effective with other clinical problems.

In this study tension headaches were conceived of as a problem-maintaining pattern of behavior preserved by rules particular to that person's interactional system. The primary intent of this research was to investigate those strategies proposed by the change model which might be effective in the treatment of tension headache sufferers. In consideration of the above, the present study was concerned with several research questions.

Research Questions

1. Is there evidence to suggest that strategies used in treatment promoted improvement in tension headache sufferers' symptoms?
2. Will change in the individual's interactional pattern occur if the headache symptoms diminish?
3. Will the headache symptoms change if other changes occur in the client's interactional pattern of behavior?
4. Will new problems or symptoms arise if the presenting problem is alleviated?
5. Is there some indication that changes that occur in treatment are maintained over time?
6. Are there aspects of this model that limit its effectiveness in treating tension headache sufferers?

CHAPTER II

A REVIEW OF THE RELATED LITERATURE

This review consists of four parts. The first two describe the characteristics of the tension headache and some of the personality features of its sufferers. Treatment methods currently in use are examined in part three. The concluding section reviews change models of therapy and related paradoxical approaches to the treatment of clinical problems.

Description of Tension Headache

The terms tension and muscle contraction headache are used interchangeably to describe chronic headaches which have no organic origin and are not vascular in nature (Diamond & Dalessio, 1978). Tension headaches may be characterized as an "ache or sensation of tightness, pressure or constriction widely varied in intensity, frequency and duration sometimes long-lasting and commonly sub-occipital. It is associated with sustained contraction of the skeletal muscles in the absence of permanent structural change, usually as part of the individual's reaction during life stress" (Friedman, 1962, p. 717). The occurrence of tension headaches has

been observed to be closely related to anxiety-producing situations (Martin, Rome, & Swenson, 1967; Ziegler, 1978).

The symptoms are typically bilateral, originating in the occipital area but frequently extending to other areas of the head. Fatique, anxiety, depression, dizziness and bright spots in front of the eyes frequently accompany the tension headache (Bakal & Kaganov, 1979; Martin, 1983).

Typically, in migraine headaches the pain is unilaterally located in the frontal or supraorbital region of the head. Frequently a migraine headache is experienced as an intense pulsating or throbbing with accompanying prodromata such as nausea or vomiting. Chronic tension headache sufferers usually develop more than eight headaches per month as opposed to less than four per month for migraine sufferers (Friedman, 1979).

Emotional conflicts are the most common precipitating factor in tension headaches whereas with migraines, attacks can be precipitated by bright lights, diet, infection, odors, alcohol and barometric changes (Ryan & Ryan, 1978). Most experts in the field of headache research stress the importance of psychotherapy in the management of tension headaches as pharmacological methods provide only short term solutions (Dalessio, 1972; Friedman, 1979; 1974; Sutherland, 1983).

Personality and Tension Headache

Tension headaches do not occur exclusively in any one

personality type (Davis, Wetzel & Kashiwagi, 1976; Philips, 1976). In a comprehensive review of both objective and projective test results, Harrison (1975) concluded that headache sufferers do perform differently on psychological tests but hypothesized that differences may result as a consequence of chronic exposure to pain rather than specific personality differences.

Henryk-Gutt and Rees (1973) and Howarth (1965) found no significant difference between normals and headache patients on the Eysenck (EPI) and Maudsley Personality Inventories (MPI). Using the MPI, Martin (1972) reported that the neurotic triad was typically elevated in tension headache patients. Philips (1976) concluded that there is little basis for the assumption that tension headache sufferers are more neurotic than normals. Their personality characteristics are indistinguishable from controls on the EPI when selected from a community rather than clinical sample. If the results for patients seeking help from physicians for head pain are compared with normals then the assumption of neuroticism is maintained. Those who seek medical help for chronic headaches appear to be a more neurotic and extraverted group. Although the research evidence is somewhat contradictory, the test results on personality instruments indicate no outstanding personality differences when headache sufferers are compared with normal populations.

One interesting feature of tension headache sufferers' behavior was observed by Dalsgaard-Nielsen (1965). Approximately two-thirds of a tension headache group recognized that psychological stressors

could play a part in the development and maintenance of headaches. Of the individuals in the study, all believed that the attacks occurred spontaneously with no apparent cause. What specific stressors precede headache development and what maintians them was a complete mystery to the subjects.

These findings correspond closely with the observations made by other investigators in the field of psychosomatic disorders. The typical patient with a psychosomatic problem is either unable or unwilling to report feelings and experiences which presents a difficult task to the interviewer who tries to understand the person's life experiences in any depth (Nemiah & Sifneos, 1970). Several reviews refer to the "alexithymic" characteristics of psychosomatic patients (Nemiah, 1975; Sifneos, 1975; Singer, 1977). Nemiah (1975) observed that an alexithymic cognitive style includes the following characteristics: "(1) an impoverished fantasy life; (2) an inability to describe feelings; (3) a constriction of emotional functioning; and (4) difficulty in interpersonal relations" (p. 142). Their style of relating is marked by a striking tendency to describe endless details or symptoms. Apparently patients pay more attention to bodily sensations than their impact on others.

Not surprisingly individuals with psychosomatic disorders have not responded well to traditional types of insight therapy (Shand, 1977). In group therapy they reject any association of physical symptoms to their interpersonal or emotional life (Ford & Long, 1977; Roberts, 1977). A referral to psychotherapy by the attending

physician was viewed by the patient as a potential rejection from treatment. During the course of therapy patients wished only to discuss issues relating to their symptoms and the accompanying treatment. Insight oriented psychotherapies apparently arouse patient anxieties that increase the use of resistance and repression (Karasu, 1979).

Treatment Approaches

In the past few years a number of comprehensive reviews have examined psychological methods for treating tension headaches (Bakal, 1975; Chesney & Shelton, 1976; Holroyd, Andrasik & Noble, 1980; Hutchings & Reinking, 1976). Prevalently used treatment approaches are EMG biofeedback and progressive relaxation. The most widely accepted drug therapy is an analgesic-sedative combination (Freidman, 1979). Cohen (1978) reports that aspirin is the most commonly self-administered drug for tension headaches. The popularity of this medication is due primarily to the rapidity with which this compound alleviates the symptoms. Because long-term use of medication has detrimental effects and becomes increasingly ineffective for many individuals, alternative treatments have been investigated. In severe cases, the prophylactic treatment of tension headaches includes the use of sedatives, tranquilizers, antidepressants and muscle-relaxant agents (Freidman, 1974).

Biofeedback

In electromyographic (EMG) biofeedback clients are taught that lowering the frequency of an auditory signal results in the lowering of tension in frontalis muscles. This is considered to be training in a general relaxation technique based on the assumption that if headaches are caused by tense muscles, then relaxing the muscles will reduce headache occurrences.

The results of several studies suggest that treatment methods using frontal EMG biofeedback are more effective than no treatment or placebo treatment in reducing headache activity (Budzynski, Stoyva, Adler & Mullaney, 1973; Cox, Freundlich & Meyer, 1975; Epstein & Abel, 1977; Holroyd, Andrasik & Noble, 1980; Tsushima & Hawk, 1978; Philips, 1977). Several researchers have questioned the use of EMG feedback on two issues: the cost effectiveness of this method as compared with other similarly effective approaches and the lack of correlation between the reduction of frontalis EMG and the reported reduction of tension headache symptoms (Beatty & Haynes, 1979; Burish & Horn, 1979; Epstein & Abel, 1977; Surwit & Keefe, 1978). Headache activity is not always associated with high levels of muscle tension nor is its successful treatment associated with the reduction of EMG levels of muscle tension (Scott, 1979).

Andrasik and Holroyd (1980) conducted an interesting study using EMG biofeedback in three groups of headache sufferers giving false feedback which led subjects to believe muscle tension was decreasing when it might be increasing, stabilizing or decreasing. All three

groups reported reduction of headache symptoms. These results suggest that learned reduction of EMG feedback may minimally account for the reduction of headache symptoms. The authors reported that while undergoing this treatment the subjects spontaneously developed strategies for coping with headache symptoms. Symptom improvement appears to be related to the participants altering the way they cope with headache-eliciting situations (Holroyd, Andrasik & Noble, 1980). Several perplexing questions arise. How did the subjects develop these coping mechanisms? What set these changes in motion? The biofeedback training may provide a context for the subject to consider previously uncontrollable situations to become controllable. Andrasik and Holroyd (1980) found that participants developed these coping strategies equally whether they were actually increasing, decreasing or maintaining EMG tension levels.

The outcomes obtained through EMG biofeedback are inconsistent with the theories that attempt to explain the etiology of tension headaches. The hypothesis that elevated levels of muscular tension result in headache symptoms is inconclusive (Epstein, et al., 1978; Philips, 1978; Neuchterlein & Holroyd, 1980). Holroyd, et al. (1977) reported that trait anxiety scores, headache history, locus of control scores and initial EMG levels were unrelated to improvement in headache symptoms. One consideration that might be overlooked in biofeedback training is the nature of the treatment setting. The client is instructed to lower his EMG levels but not told how. Within this situation, there are expectations that changes will

occur, but the client does not know how this is to happen. The biofeedback therapist connects the equipment to the headache sufferer and waits for changes to occur. In many cases the symptoms are reduced despite the fact that EMG levels do not significantly vary.

Progressive Relaxation

In progressive relaxation, clients are taught to relax by sequentially tensing and relaxing large muscle groups within their body. Deep muscle relaxation as developed by Jacobson (1938) and Wolpe (1958) have been used with success in treatment of headaches of a psychosomatic nature (Beiman, Israel & Johnson, 1978; Chesney & Shelton, 1976; Haynes, et al., 1975; Hutchings & Reinking, 1978; Mitchell & White, 1976; Tasto & Hinkle, 1973).

Numerous investigations have been conducted to compare the effectiveness of frontal EMG biofeedback and relaxation training. No significant difference in effectiveness has been reported (Cox, et al., 1975; Haynes, et al., 1975; Reinking & Kohl, 1975). An important difference is that progressive relaxation is a much less expensive method of treatment than EMG feedback. When the two modalities are combined they are generally more effective than either relaxation training or EMG feedback alone (Chesney & Shelton, 1976; Hutchings & Reinking, 1976).

Cognitive Behavior Therapy

More recently investigations have expanded to cognitive behavioral approaches which focus on negative thought processes and

behavioral antecedents of headache (Bakal, Demjen, Kaganov, 1981; Holroyd & Andrasik, 1978; Holroyd, et al., 1977). The points of intervention in cognitive behavior therapy are in the areas of internal self-talk and attitudes encompassing irrational belief structures. For the symptoms to decrease these cognitive structures must change. The task of the therapist is to develop positive cognitions in the context of anxiety arousing situations to prevent precipitation of the chain of events leading to a tension headache. The client is, therefore, learning to control the arousal of his or her own anxiety.

Holroyd and his colleagues (1977) have argued that symptom reduction in tension headaches results from alterations in person-environment interactions. Tension headache sufferers need to learn to monitor the onset of headache symptoms and learn to engage in coping responses. Self-control treatment that focuses on modifying cognitive responses to stressful situations appears as effective as EMG feedback in treating tension headaches (Holroyd, et al., 1977). In a 1978 study, Holroyd and Andrasik reported that when a cognitive self-control plus relaxation training group and a headache discussion group were compared all three groups were equally effective in reducing headache symptoms. Although the discussion group was designed to be a placebo control group this treatment proved to be as effective as the other treatment groups. The positive outcomes that were obtained do not appear to have resulted from specific coping strategies as the authors suggest. Aspects of the treatment process

which influence change in the presenting problem appear to be common to all three groups. What these influences might be was not discussed.

Hypnosis

Reported studies using hypnosis as a means of treatment for tension headaches are relatively rare. Argueta-Bernal (1979) found that hypnosis and EMG feedback were equally effective in alleviating headache symptoms. When progressive relaxation, EMG biofeedback and hypnosis were compared, no significant differences among the treatments were found although all produced positive treatment effects (Schlutter, Golden & Blume, 1980). Improvement was attributed to learning a method of general relaxation. In contrast, Hilgard & Hilgard (1975) expressed the belief that cognitive relaxation and a feeling of effortlessness in hypnosis are more likely more important than actual physical relaxation. Participants preferred hypnosis to other methods because less effort was involved.

In a review of clinical hypnosis used with psychosomatic disorders, de Piana and Salzberg (1979) contended that symptom improvement occurs with tension headaches when hypnosis is used to alter patient perceptions. The literature in the area of hypnosis does not provide explanations for change in the symptom but rather describes methods to encourage change. From the relatively little research that has been done, hypnosis appears to be another effective treatment for tension headaches.

Summary

The factors involved in the reduction of tension headaches remain uncertain. Nonspecific factors are commonly reported as facilitating the outcome in many studies. In an extensive review of psychotherapies in general, Luborsky, Singer, and Luborsky (1975) maintain that common elements such as a helping relationship plus non-specifics such as suggestion and placebo may be the common elements producing change. Outcome studies using biofeedback and progressive relaxation do not clearly specify the common elements of treatment that contribute to symptom reduction. Headache activity is not always associated with high levels of muscle tension nor is remission of symptoms correlated with reduction of muscle tension. The outcomes of several studies have suggested individual differences as an important variable in the etiology of tension headaches (Bakal & Kaganov, 1977; Philips, 1977; Walters & O'Conner, 1971; Ziegler, Rhodes & Hassanein, 1978).

Biofeedback, relaxation training and hypnosis share one common feature and that is the focus on symptoms rather than the underlying dynamics. One study that was conducted to compare biofeedback training and brief eclectic headache-focused psychotherapy (a combined cognitive-behavioral and dynamic approach) concluded that both the treatments were equally effective in reducing headache symptoms (Wieselberg-Bell, et al., 1983). The authors interpreted the outcome as resulting from elements common to both treatment modalities, specifically a focus on symptom resolution rather than

insight. In view of reports that psychosomatic patients seem to be unwilling to deal with anything but their symptoms, this one factor alone may encourage the headache sufferer to continue with treatment. The client is not required to modify his view of reality to match the therapist's view.

Rarely in the outcome literature is anything examined but reduction of headache symptoms. One notable exception has been the series of research studies by Holroyd and Andrasik (1978, 1980) who report subjects developing coping mechanisms on their own. As yet no research has attempted to examine whether other changes such as improvement in relationships occur when symptoms diminish. This area merits further investigation. Research which describes some of the potentially effective components in the treatment process appears to be necessary to increase the knowledge of treatment strategies for headache sufferers.

A Change Model of Therapy

The therapies of Haley (1963, 1976), Erickson (Haley, 1967, 1973) and the Brief Therapy Center in Palo Alto follow the tradition of several new branches of psychotherapy that make explicit the processes of change via the development of psychotherapeutic models.

The differences between describing and interpreting the psychotherapy change process are considerable. A theory is a tentative statement that attempts to interpret why things happen as

they do. A model, however, is a pattern or copy of already existing phenomena which can be imitated or recreated (Lankton, 1980). Models are content free and thus provide specific criteria for making therapeutic interventions with clients. Change strategy approaches make explicit observations based on clinical experience and suggest strategic interventions to promote new ways of solving problems.

As yet suitable theoretical explanations for why these systems-based strategic therapies are effective are somewhat meagre. Rather it appears that psychotherapy is at the stage of developing and experimenting with effective models of change for specific clinical problems. The approaches included in this review contain considerable overlap in their assumptions and strategies. Milton Erickson's work has left a strong imprint on the clinical approaches used by Haley and the Palo Alto group, and the conceptualizations and strategies developed at the Brief Therapy Center are a direct result of Erickson's influence and encouragement. All these change models have in common an interactional view of problem maintenance and the goal of developing strategies to encourage new ways of behaving.

The Brief Therapy Model

Brief therapy is a short term psychotherapy model developed at the Mental Research Institute (MRI) in Palo Alto, California. Their approach is an integration of a variety of strategic interventions directed at promoting change in behavioral interactions. Its basic

principles have been delineated by Watzlawick, Weakland, Fisch, and their colleagues in a variety of publications (Fisch, Weakland & Segal, 1982; Fisch, Weakland, Watzlawick, Segal, Hoebel & Deardorff, 1975; Herr & Weakland, 1979; Watzlawick, Beavin & Jackson, 1967; Watzlawick, Weakland & Fisch, 1974; Weakland, Fisch, Watzlawick & Bodin, 1974).

Psychological difficulties which bring people for treatment are assumed to be problems of interaction involving the client and his or her interactional system. The presenting problem offers what the individual is willing to work on, a concrete representation of what is wrong and an indicator of any change made (Weakland, et al., 1974). Change can then be most easily made if the goal of therapy is reasonably small and clearly stated. When one small change is introduced into the system, a positive cycle of change is instigated that will influence the total interactional system.

The leverage for change consists of what the "Brief Therapy Manual" describes as strategic interventions (Fisch, et al., 1975). In its essence, the brief therapy approach is a set of guidelines for strategic psychotherapy. Feldman, Strong & Danser (1982) report the usefulness of the technique of prescribing the symptom in dealing with depressed clients. The therapist may implicitly encourage the client to remain depressed by commenting, "It's a wonder you aren't more depressed." The client can respond by remaining depressed and thus acknowledge control over the symptom or show decreased depression which also acknowledges control over the symptom (Weakland, et al., 1974; Feldman, 1976).

The therapist is able to increase therapeutic influence with a client by:

1. Grasping the client's view of his problem.
2. Acknowledging and accepting that view.
3. Extending or turning that view in a new direction.
4. Utilizing that new direction to suggest new actions for the patient to take in dealing with his problem (Fisch, et al., 1975, p. 23).

The use of client language facilitates the cooperation of the client and reduces the likelihood of encountering resistance when requesting the client to follow a directive. Information is gathered during the interview to develop a knowledge of what the problem-maintaining behaviors are as well as the context of the problem. This information enables the therapist to formulate strategic interventions. The strategies are designed to encourage behavioral changes that will intervene in the functioning of the system by the development of a new set of rules. Change is conceived to occur by action as opposed to insight (Watzlawick, 1980).

Although the brief therapy model is composed of several clearly defined stages, in practice the strategies are usually overlapping. Fisch, et al., (1975) and Weakland, et al., (1974) have outlined the phases of therapy as follows:

1. Initial contact (prior to the first interview).
2. Determining the problem.
3. Attempted solutions.
4. Minimal treatment goals.
5. Treatment strategies.
6. Termination of treatment.

Initial Contact

The initial contact with the client or party calling for an appointment determines who in the system is most bothered by the problem and therefore the person who is likely to offer the best opportunity for change in the system. Three situations which generally call for this groundwork are:

A) When someone other than the identified patient calls for an appointment,

B) When the identified patient enters treatment under duress or coercion, or

C) When a caller asks for family conference without specifying the rationale (Fisch, et al., 1975, p. 10).

Frequently the person who telephones is asked to come in to help gain more information on the problem. Sometimes the identified patient is not directly treated in the therapeutic setting. The laying of groundwork before the first interview including who should

attend is considered an important aspect of treatment because succeeding actions in the therapy will develop from this foundation. The individuals most interested in change need to be the ones in treatment as they are the most likely to cooperate with the treatment procedures.

Determining the Problem

The purpose of the initial interview is to gain specific information on the nature of the problem. The most frequent pitfall at this stage is the acceptance of generalities when describing the problem. Specific and sufficient information is needed to provide the data to grasp the problem, plan the interventions and evaluate the outcome. The primary method of gaining information is through questioning such as "What is the problem?" and "How is that a problem for you?". One strategy that is used during the interview especially when gathering information is the use of the one-down position. The therapist in his manner or speech appears modest or confused. The purpose of the strategy is to assist the client in feeling more relaxed and to be more cooperative in therapy if he does not view the therapist as an all-powerful authority figure. This strategy is also used to establish an interaction set between the therapist and client and to avoid old interaction patterns. By relating this way the client is placed in the position of being helpful to the therapist. This is one of the more significant therapeutic strategies of brief

therapy that is infrequently mentioned.

Determining Attempted Solutions

The development of a complete understanding of what the client has been trying to do to solve the problem is an essential feature of the treatment process. Examining attempted solutions avoids insulting clients by telling them to do what they have already done and allows the therapist to assess if the attempted solution is more of a problem than the problem itself (Herr & Weakland, 1979). Many problems may be created and perpetuated by inappropriate attempted solutions.

Treatment Goals

Clients are encouraged to develop a small specific goal to indicate to them when a clear change has occurred. The establishment of a goal also suggests that counselling is not an eternal process. In the brief therapy model the treatment sessions are limited to ten. Whenever possible the goal focuses on the appearance rather than the disappearance of something. Watzlawick (1980) reports that failure to achieve successful resolution of the problem occurs most frequently in situations where the treatment goal is not clearly specified either directly or indirectly. Specification of treatment goals assists both the therapist and client to avoid developing Utopian expectations concerning the outcome of treatment.

Treatment Strategies

Strategic interventions are based on the assumption that the client persists in a solution despite failure or worsening of the problem because of seeing the problem in a way that convinces that the solution is the only logical or sane thing to do (Fisch, et al., 1975). In formulating change strategies, the most crucial information needed is how the client views the nature of the problem and what solutions have been attempted thus far, as this provides the language to fit with the individual's view of reality when devising and delivering an intervention.

Successful interruption of problem-maintaining behaviors often requires the implementation of paradoxical instructions that appear in opposition to the goals being sought. These directives are based on the principle "similia similibus curantur" that the cure is to be found in the pathogen (Watzlawick, et al., 1967). Symptoms developed by habitual and long-lasting paradoxical interactions are approached in an equally paradoxical manner to resolve them. The use of paradox allows the therapist to implicitly tell the client to change by requesting no change.

"Paradox may be defined as a contradiction that follows correct deductions from consistent premises" (Watzlawick, et al., 1967, p. 188). The theoretical underpinnings for the concept of paradox originate in Russell's Theory of Logical Types. The central thesis of this position is that when there is discontinuity between a class

and its member, confusion and paradox arise. The class cannot be a member of itself, nor can one of the members represent the class, because the term used for class is of a different level of abstraction than the term used for its members (Bateson, Jackson, Haley & Weakland, 1956). The impact of paradox in human relationships was initially described by Bateson and his colleagues (1956) in their observations of the double bind in the interactional patterns of schizophrenic families. An outgrowth of their work is the conceptualization of the therapeutic double bind. The therapist encourages the client to change while remaining unchanged, with the implication that the prescription is the agent of change. The client changes by demonstrating control over the pathology or resists by behaving nonsymptomatically (Soper & L'Abate, 1977). The communication inherent in the paradoxical directive goes against common sense and at first glance may even appear to be nonsensical.

The nature of the directive given by the therapist appears paradoxical only if one remains within the boundaries of the existing system of the client. A paradoxical intervention enables the therapist to change the rules by which operation of the system is governed, when these rules do not include a solution to the problem.

Prescribing the symptom is one form of paradoxical intervention included in the class of strategies known as therapeutic double binds (Watzlawick, et al., 1967). The therapeutic double bind forces the client to move outside the frame set by his dilemma. The use of

double binds makes it possible for the participant to look at the old system from outside thereby allowing the introduction of metarules into a rigid system that is unable to generate them from within itself (Watzlawick, et al., 1974). The strategies developed within the Brief Therapy Model from initial contact to termination involve the use of therapeutic double binds.

"Second order change through paradox is undoubtedly the most powerful and elegant form of problem resolution known to us" (Watzlawick, et al., 1974). Change can be conceived to occur at two levels. First-order change occurs when the system remains intact while some part or element of it changes. Second-order change involves a shift in the system itself. When second-order change occurs, sudden and spontaneous differences can be observed. Strategic interventions are designed to facilitate second-order change.

Interventions

Developing a systematic framework for the classification of change strategies is a difficult task. Strategic interventions have been presented using various schema (Fisch, et al., 1982; Rohrbaugh, Tennen, Press & White, 1981; Weeks & L'Abate, 1982). A brief discussion of the types of strategies used to promote change is presented in the following review.

Reframing

Reframing refers to the process of helping the client to develop a different framework for perceiving and responding to a problem. The use of reframing allows the individual to "break out of limiting preconceptions to a broader understanding of human possibilities" (Erickson & Rossi, 1981, p. 26). The therapist acknowledges and accepts the problem as stated but adds additional information to shift the meaning attributed to the situation. Watzlawick and his associates define reframing as changing "the conceptual and/or emotional setting or viewpoint in relation to which a situation is experienced and place it in another frame which fits the 'facts' of the same concrete situation equally well or even better, and thereby changes its entire meaning" (Watzlawick et al., 1974, p. 95). For example, resistance to change can be reframed as a necessary prerequisite of change. Lankton & Lankton (1983) contend that reframing is especially useful in treating clients who have problems they consider to be out of their control. Variations such as "positive connotation" (Palazzoli, et al., 1978) and relabelling (Weeks & L'Abate, 1982) can also be included within the strategy of reframing. Watzlawick and his colleagues at MRI consider reframing to be the most fundamental and general instrument for change (Watzlawick, et al., 1974). Reframing may be used to set the stage for future interventions or may be in itself a powerful device to prompt change.

Prescriptive Strategies

Prescribing strategies enjoins the client to engage in or exaggerate a specific behavior in order to decrease or eliminate it. Although most commonly known as symptom prescription, other variations include symptom scheduling, paradoxical intention, and ritualized prescriptions.

Clients may be encouraged to engage in the behavior in a new context (e.g. time or place) so that the symptom comes under their control. Acting on such a prescription usually results in a decrease of the symptom. If the symptom increases, the client also gains voluntary control over an unchangeable symptom. The prescription must be carefully framed in a rationale appropriate to the client's view of the problem.

Restraining Strategies

When using restraining strategies the therapist discourages change. The underlying message is that in order to change, stay the same. Among the strategies most frequently used are considering the dangers of improvement, telling the client to slow down change and predicting or prescribing a relapse. In the event that client motivation is low or there is considerable ambivalence about change, the dangers of improvement may be discussed to improve motivation. If changes have occurred rapidly, the client may be instructed to slow down or hold back on changes for a few weeks. If improvement

has been made in the presenting problem and the client is skeptical about maintaining the change, the therapist can prescribe or predict a relapse in the behavior as an ever increasing development of control.

Positioning Strategies

The principle objective of positioning strategies is to reduce or to avoid engendering resistance in the client. The therapist may gather information about the problem or deliver intervention from a "one down position", i.e. humble or confused, to increase the possibility of compliance. When the therapist shifts from one position on a problem to another, usually because resistance is encountered, this is referred to as "making a U-turn" (Fisch, et al., 1982). Frequently this involves an admission of error or failure on the part of the therapist.

Jamming Strategies

Jamming is a strategy which is specifically "designed to reduce the information value of interpersonal communications, thereby making verbal exchanges between the two parties somewhat futile since there is no way of knowing if they really are getting to the facts of the matter" (Fisch, et al., 1982, p. 156). This intervention is most frequently used when the two individuals are trapped in an interactional pattern where one person accuses the other of wrong doing and the second person denies the accusation and defends

oneself. Jamming interrupts the interpersonal deadlock.

Summary

These strategic interventions form the basis for shifting the problem-maintaining cycle of behavior away from unsuccessful attempted solutions. No two interventions will be exactly alike as their formulation is dependent on the nature of the problem, the client and the therapist.

Termination

Rapid termination of treatment is considered an integral aspect of the brief therapy model. Therapists may have a stronger investment in continuing treatment than in terminating it. Clients are apparently much more satisfied with short term treatment than their counsellors (Johnson & Gelso, 1980).

Usually the therapist suggests discontinuing treatment when the presenting problem has improved. Expressions of concern about maintaining improvements are frequently responded to by the therapist in a manner which predicts some type of relapse to old behaviors or suggests that the client should not improve any further. Warning the client of potential relapses but framing them as a temporary but necessary part of growth is also used to maintain the change process.

Treatment may also be terminated when the time limit has been reached or when the client expresses dissatisfaction with the results. Fisch, et al. (1982) assert that the therapist should avoid

challenging the client's position when treatment has not resolved the problem. If a client has had difficulty acknowledging help or improvement, positive results are minimized and skepticism is expressed about future progress (Weakland, et al., 1974). When a client has been particularly uncooperative during treatment, the therapist may choose to state that termination is desirable not because of lack of improvement but because of the risk of resolving the problem should treatment continue (Fisch, et al., 1982).

Outcomes

The Palo Alto group proposes that evaluation of outcomes be concerned with what treatment intends to do and its observable results (Fisch, et al., 1974). The evaluation then is focussed on two questions: "Has the complaint been alleviated? and Have behavioral changes occurred as planned?" (Fisch, et al., 1974). The results of follow-up interviews indicate a two thirds success rate for the brief therapy approach using an average of seven sessions (Watzlawick, 1980). The most obvious benefit of these strategies is the rapid and effective treatment of problems normally requiring long term treatment. On this basis alone, the brief therapy model merits consideration and research.

The Directive Therapy Model

Directive therapy, a communication oriented approach for

treatment of emotional and behavioral disorders, maintains that symptoms are "communicative acts that have a function within an interpersonal network" (Haley, 1976, p. 99). The symptom is an analogy that has its antecedents in the numerous aspects of the client's life situation, including the relationship with the therapist. Metaphors that are expressed with bodily sensations such as a headache can be understood as metaphors of the person's intimate relationships. Developing a headache can be seen as an analogic tool to express a statement about the individual's interpersonal system.

Haley (1963, 1967, 1973, 1976) has developed a comprehensive statement of directive therapy through his collaboration with Milton Erickson. Therapy is based on the concept of giving directives. Directives have a threefold purpose: (1) to have the client behave differently, (2) to intensify the relationship with the therapist and (3) to gather information on the client's change process. Treatment involves the client's gaining control of symptoms through the use of directives using therapeutic paradoxes, metaphoric tasks and activities that involve changing the context of the problem (Haley, 1976).

Haley (1963) defines paradox as a "directive given in a conflicting way either simultaneously or at a different moment in time" (p. 17). The basic therapeutic paradox is a directive relationship in which symptomatic behavior is encouraged. In addition, the use of paradox includes the provision of an ordeal

which will continue as long as the person continues with the symptomatic behavior.

Gentry (1973) reported the use of directive therapy in the treatment of a woman with frequent migraine headaches. Initially she was encouraged to go through symptomatic behavior under the therapist's direction. Since she agreed she was punishing herself with these headaches, she was invited to make the punishment beneficial to her by engaging in work or the family budget each time she experienced a headache. Budgeting was a task she disliked intensely. Giving her a specific task to do while having her headache placed the symptom under the therapist's control. By the eleventh and final session, the patient affirmed that she was totally headache free. A 12 month follow-up indicated that there had been no reappearance of the headache symptoms (Gentry, 1973).

The Strategic Therapy of Milton Erickson

Erickson (Haley, 1973) conceived of his style of therapy as strategic in nature where the therapist must identify solvable problems, set goals, design interventions to achieve these goals and examine outcomes to ascertain effectiveness. Although Erickson is concerned with how behavior affects feelings and thoughts, his strategies to change behavior usually depended upon indirect means of influence (Weakland, et al., 1974).

In strategic therapy, the therapist takes responsibility for devising methods to encourage change. Erickson established the use of a variety of techniques based on his clinical experience and his knowledge of hypnosis (Haley, 1967, 1973). Interventions involve strategies such as communicating in metaphor, reframing, confusion technique, and symptom prescription. Everything a person does is considered to be useful to the change process. Erickson stressed that when developing strategies it is crucial to accept what the client offers, and turn this to positive use even if what is offered might appear as resistance or pathology. His mode of operation appeared to be based upon the interpersonal impact of the therapist outside the patient's awareness frequently by using metaphor. The development of insight, or understanding of feelings or motivations were not emphasized in the treatment process.

Erickson (1953) reported on the use of hypnosis in the treatment of an unwilling subject who suffered from intense, unlocalized headaches. Each headache was accompanied by an emotional upset characterized by bitterness and verbal attacks on those around her. She was referred for treatment by her employer who had fired her from her job.

At the first interview she was informed that in order for the hypnosis to be of any value, she would need to be seen during one of her headaches. In trance she was directed that when a headache developed she was to go to sleep for one half hour, spend one hour

condemning and criticizing anyone she wished in fantasy, then sleep for one half hour more after which she would arise feeling comfortable and rested.

Later in treatment she was prescribed the symptom of developing the headache at a certain time and day, resisting it and then following the previous suggestions. A week later she was also directed to develop the emotional disturbance that forewarned her of an impending headache. She was to resist it and then return to her room to sleep. During trance she was given a review of instructions to follow and commended on her learned ability to deal with the problem of her headaches. A fifteen year follow-up indicated she experienced approximately three headaches per year which responded readily to brief rest.

The parallels between Erickson's approach to treatment of clinical problems and the brief therapy model are considerable. Fisch, et al. (1974) acknowledge that the brief therapy approach includes the extensive adaptation of Ericksonian principles in the development of strategies such as symptom prescription, reframing, therapeutic double bind, and encouraging a relapse.

Related Paradoxical Approaches

Paradoxical directives have been observed to promote therapeutic change by clinicians of divergent orientations. Instructing a client to preserve the symptom or to practice becoming more proficient at

producing it has successfully led to symptom reduction and/or disappearance (Raskin & Klein, 1976). These strategies appear in the literature with such diverse labels as negative practice (Dunlap, 1946), paradoxical intention (Frankl, 1960, 1975), symptom reenactment (Rosen, 1953) and symptom prescription (Farrelly & Brandsma, 1974). Evidence from other studies suggests that paradoxical strategies are an effective treatment approach (Ascher & Turner, 1979; Feldman, Strong & Danser, 1982; Lopez & Wambach, 1982; Newton, 1968; Solyom, Garza-Perez, Ledwidge & Solyom, 1972; Turner & Ascher, 1979).

If an obsessive client were to come for treatment each therapist might direct the client to deliberately practice the symptom. What is done and what is expected are similar regardless of the theoretical orientation of the practitioner. The differences exist most extensively when an explanation is undertaken to communicate how the procedure works.

The behaviorist explains the technique in terms of learning theory principles. Ascher and Efran (1978) define paradoxical intention "as a behavioral prescription requiring clients to perform responses that appear incompatible with the goals for which they are seeking assistance" (p. 547). A redefinition rationale is used by humanists and logotherapists to explain why paradoxical directives bring results. Paradox transforms resistance by accepting the patient's avoidant behavior and then redefining it (Kopp, 1977).

Paradoxical intention enables "the patient to develop a sense of detachment toward his neurosis by laughing at it" (Frankl, 1960, p. 523). Overcoming anxiety and change in the symptom are achieved if avoidance is replaced by intentional effort. Frankl's technique of paradoxical intention remains outside the existential tenets of logotherapy. An interpersonal power approach views paradox as a way of changing the meaning of the symptom by the therapist not allowing the symptom to control the definition of the therapeutic relationship (Farrelly & Brandsma, 1974).

Summary

Therapies using the change model assume that difficulties arise when coping mechanisms are continually repeated or escalated despite their inability to resolve problems. Usually treatment is sought when an impasse in problem-resolution has been reached. Strategies are then developed to assist the client to move through the impasse and generate new solutions. While the use of paradoxical strategies is one of the cornerstones of these change models, any maneuver used to promote change can be described as a strategic intervention.

Although reports of the application of paradoxical strategies continue to proliferate in the research literature, relatively little explanation is offered with respect to how these paradoxical strategies bring about change (Weeks & L'Abate, 1982). Rather the

emphasis has been and continues to be on the observation and communication of the impact of these strategies on a host of clinical problems.

CHAPTER III

METHOD

Rationale

The main purpose of this study was to observe and describe the impact of therapeutic change strategies on tension headache sufferers' symptoms and behavior. Previous treatment contacts with headache sufferers indicate that because of individual differences, there is a need for a variety of options in responding to the presenting problem. The case study was chosen as a research method to allow for as much variation as possible with respect to individual differences in participants, and to enhance therapist maneuverability during the treatment process. The case study method was employed because it offered an opportunity for observing and describing the treatment process with an individual in a systematic way. Tape recorded interviews and self-reports from participants were used to collect data. Hersen and Barlow (1976) assert that the case study method allows for description of extremes in behavior as well as common factors in the process of therapy. Lazarus and Davison (1971) cite the following advantages of the single case design:

1) foster clinical innovation,

2) cast doubt on theoretical assumptions,

3) permit study of rare or unusual phenomena,

4. develop new technical skills,

5) buttress theoretical views,

6) result in refinement of techniques, and

7) provide clinical data to be used as a departure point for subsequent controlled investigation (p. 198).

A more comprehensive design was chosen to combine the case study method with the A-B (baseline-treatment) design (Hersen & Barlow, 1976). In the A-B design the target response (number of headaches) was repeatedly measured during a pretreatment baseline, during treatment and at follow-up (Jessup, Neufeld, Merskey, 1981). Treatment effectiveness was considered to be increased as the length of the baseline increased and if improvement occurred when the treatment was introduced (Jessup, Neufeld & Merskey, 1979). When information was gathered on several occasions over time this further strengthened the internal validity of the case study (Kazdin, 1981).

Although the application of the A-B design strengthens the relationship between treatment and outcome this design does not typically describe the variety of process variables as they occur during treatment. Since both outcome data and process variables were considered germane to the study a record of all the interviews was maintained through audio recordings. Outcome data were obtained via

client self-reports as to frequency, intensity and duration of headaches through both verbal and written reports. Descriptions of the interventions used during treatment were transcribed from the tape recorded interviews.

Kazdin (1981) maintains that the most important precondition for drawing inferences from a case study is the systematic collection of data rather than reliance on ancedotal material. Incorporation of the A-B design with the case study method, therefore, allows for a description of the process of therapy as well as providing data for a tentative link between treatment and outcome.

Sample

Newspaper announcements of a headache research project describing counselling methods for the treatment of tension headaches were used to generate subjects for the study (Appendix A). Persons reporting symptoms of tension headache (Wolfe, 1963; Friedman, 1979) with a regular occurrence of two or more headaches per week were selected (Appendix B).

A total of 47 persons responded to the advertisements for participants in a headache research project. The respondents were screened by telephone according to inclusion criteria (slow and gradual onset, bilateral, deep and steady pain) and exclusion criteria (no prodromal symptoms, no abrupt or sudden onset unilateral pain) (Andrasik & Holroyd, 1980). Respondents to the advertisements were categorized as shown in Table 1.

Table 1

Respondents to Advertisement for Tension Headache Sufferers

Excluded		Included	
Migraines	16	Accepted for Study	10
Cluster Headaches	1	Withdrew before Study Began	3
Mixed Headaches	4	Total	13
Physical Origin	4		
Less than 2 per week	4		
No reply to initial contact	5		
Total	34		

The 10 individuals accepted for the research project included seven women and three men ranging in age from 20 to 55 years with a mean age of 34.5 years. Five subjects were randomly assigned to the initial treatment group and five to the delayed treatment group. All participants in the initial treatment group completed the required baseline records, treatment, and follow-up interviews.

Two subjects assigned to the delayed treatment group decided to withdraw from the study after the 13 week waiting period although they both continued to have twice weekly tension headaches. Two subjects in the delayed treatment group began treatment 11 weeks after completing the original baseline data. One participant (S.7) prematurely ended treatment due to a six-week city-wide bus strike. The final evaluation interview had to be completed by telephone at the end of the treatment period. Subject 6 considered the initial interview useful enough to begin making changes while waiting for the second interview to occur 13 weeks later. No further treatment was required.

Procedure

Following initial telephone screening participants were seen individually by the investigator for an intake interview. This interview was considered to be the first session in the treatment process, not a neutral contact as usually perceived by researchers. Occasionally participants were given a specific intervention in the

intake interview if necessary. The intake interview included the administration of several forms, a brief explanation of the purpose and requirements of the study and an opportunity for selection by lottery to the initial treatment or delayed treatment group. The participants were asked to complete a research permission form (Appendix C), an intake sheet (Appendix D), a medical form (Appendix E) and were given instructions to maintain a record of their headaches (Appendix F) for two weeks to establish a baseline for frequency, intensity, and duration of headaches as well as to indicate the amount of medication used. When the subjects attended the initial interview they were informed that returning a signed Medical Form from their physician within two weeks was required. Each subject maintained a headache record chart for a period of two weeks and returned it in person or by mail. Everyone in the study had been suffering tension headaches for at least one year before beginning treatment.

All subjects who participated in the study completed the remaining information before the second session. The number of treatment sessions ranged from two to eight interviews. Each of the five subjects in the initial treatment group was interviewed at the end of ten weeks to evaluate the headache frequency, medication usage and any other changes that occurred in their life. Because the Christmas holiday season occurred at the end of the initial treatment period, the delayed treatment subjects had their treatment period extended an additional three weeks. All subjects completed treatment

by the end of 23 weeks. The initial treatment group subjects were contacted by letter (Appendix I) and interviewed in person for their 3 month follow-up. A summary table of procedures from sample selection through to follow-up is presented in Table 2.

All participants in the initial treatment group maintained a chart of headache activity for two weeks prior to the second session, for one week prior to the final treatment session, and for the two weeks before the follow-up session. The participants in delayed treatment group also recorded headache activity for three time sequences: the two weeks following the intake interview, one week prior to beginning treatment and two weeks prior to the conclusion of treatment.

Questionnaires on subject self-perception were administered to all participants at the conclusion of the treatment period (week 10) and at the end of the 23 week period. The purpose of the questionnaires was to assess whether any changes in symptoms or behaviors had occurred. Information regarding changes was also extracted from the verbalizations of the subjects contained in the tape recorded interviews. The results of all subjects who received treatment were included in the data analysis.

Outline of Treatment

Treatment consisted of a maximum of ten individual sessions using strategic interventions as suggested by the change model. The

Table 2

Procedure

1. Advertise by Newspaper
2. Telephone Screening
3. Select Subjects According to Criteria
4. Intake Interview (Week 1) Randomly Assigned to:

a	b
Initial Treatment Subjects	Delayed Treatment Subjects
Collect Baseline Data (Week 3)	Collect Baseline Data (Week 3)
Treatment	No Treatment
Collect Results (Week 10)	Collect Baseline Data (Week 13)
No Further Treatment	Treatment
Collect Follow-up Data (Week 23)	Collect Results (Week 23)

therapy and research for this project were carried out by the author of the study. Some of the limitations of this overlap in roles are discussed in Chapter Five.

The principles of the treatment approach were based on the unique data presented by each participant and the hypotheses developed by the therapist during treatment. Idiosyncratic interventions were developed specific to the information gathered on the presenting problem and the corresponding attempted solutions. These interventions are presented verbatim in the case study descriptions. Other more general interventions described in the literature were also used in treatment when it appeared that such a strategy, e.g. go slow or prescribe a relapse, would enhance the change process.

Criteria for Evaluation of Data

The tape recorded interviews were analyzed by the experimenter to assess the interventions used and the changes that occurred during each participant's course of treatment. Change or lack of it regarding symptoms and interactional patterns were evaluated from subject's responses during each interview as well as the results of the Headache Record Chart and the Self-perception Questionnaires. Changes in symptoms and/or interactional patterns were assessed according to the following criteria:

a) Success--relief of the presenting problem: participants thought their headaches were under their own control or were able to make changes in their own behavior patterns to control the symptom.

b) Partial Success--considerable but not complete relief: participants were often able to control their headaches or were frequently able to change their own behavior patterns to gain partial control of the symptom, and

c) Failure--no change in the presenting problem: participants continued to experience their headaches as out of control or were unable to change their behavior patterns to gain control of the symptom or were still looking for ways to make old solutions work.

CHAPTER IV

RESULTS

Over the course of the research study, data were collected from the participants through tape recordings of treatment and follow-up interviews as well as self-reports on a Headache Record Chart, Questionnaire I, and Questionnaire II. Information extracted from these data form the results of the study as presented in the case study reports. A graph of each participant's headache frequency throughout the study is presented at the conclusion of each case report. All subjects were evaluated according to the criteria established in Chapter III in the analysis of data section. Age did not appear to be a factor in terms of outcome according to the evaluation criteria. A summary of the outcome data is presented in Table 3 (Initial Treatment Group) and Table 4 (Delayed Treatment Group).

Table 3

Outcome Ratings for Initial Treatment Subjects

Subjects	No. Interviews	End of Treatment[a]	Follow-Up[a]
1	7	S	S
2	3	S	S
3	6	S	S
4	6	PS	PS
5	8	S	S

[a]Rating by criteria, S = Success, PS = Partial Success.

Table 4

Outcome Ratings for Delayed Treatment Subjects

Subjects	No. Interviews	End of Treatment[a]
6	2	S
7	5	PS
8	8	S

[a]Rating by criteria, S = Success, PS = Partial Success.

Case Study Data

Subjects in Initial Treatment Group

SUBJECT #1

Session #1

During the last eleven years Ms. G's tension headaches had steadily worsened as management problems with her youngest child and marital conflict had intensified. At the initial meeting Ms. G. stated that she would like to gain control over her headaches. The data from her headache record chart indicated that she began treatment with three headaches per week which she usually controlled with one to two fiorinol.

Session #2

Ms. G. described herself as a stoic who never asked for help. Despite her numerous familial problems she had always managed to care for seven children without much assistance from her husband. Headaches seemed to arise during two specific situations: when there was a management problem with her adolescent mentally handicapped daughter or when she had an argument with her husband. Both of these areas of conflict occurred frequently during the week. Ms. G. was asked to consider the following question:

Intervention:

Th: When something changes there are positive as well as negative

aspects. If your headaches went away, what would be the disadvantage of eliminating them? Over the next week consider what some of these negative aspects might be.

Cl: I can't see any disadvantages.

Near the conclusion of this interview, the therapist learned that Ms. G. was also seeing another therapist on a weekly basis. For the purposes of the study Ms. G. should have been excluded as this confounds the research process. However, since treatment had been promised, it was decided to include the data in the results and continue treatment.

Session #3

When the therapist inquired if Ms. G. had considered any of the negative aspects of getting rid of her headaches, she quickly replied that she "couldn't think of any" and moved on to a long description of the previous week's difficulties with her daughter. Ms. G. outlined the changes she wanted to make in her life which would allow her to continue in her role as the strong, cheerful mother who never gives in to her emotions. Her objective was to always feel good and be able to be helpful to others. Her headaches were an obstacle to this goal. At the conclusion of the session the therapist delivered the following statement:

Intervention:

Th: The message is clear that you don't get help with your family especially Ann (the youngest child). You are the one who helps others. The disadvantage from my perspective if you didn't have these headaches, is that you would not be getting the help you're getting with the problems you have. You now have a concrete, legitimate reason for seeking attention and help. If you had no headaches you wouldn't have a reason for seeking help. I would like you to think about this for a week.

Although there was no verbal response to this intervention, Ms. G. was visibly upset by what the therapist had said.

Session #4

During the intervening week Ms. G.'s headache frequency decreased to one. Throughout the interview she remained pessimistic about change although she noticed several differences. She reported feeling better this last week than she had for several months and that her relationship with her daughter had improved.

Intervention:

The therapist agreed that she was wise to be pessimistic about maintaining the changes and instructed her to return to her old ways of behaving to see if she could bring back her headaches.

Session #5

The focus of Ms. G.'s problems then shifted from her daughter to the marital arena. Her headaches had subsided except when there was an argument with her husband. When they did occur the intensity had decreased. Ms. G. was seriously considering a separation from her husband. Once again the therapist supported Ms. G. in her pessimism about improvement with her marital problems. The major problem for Ms. G. was that her husband was critical of her household or family duties.

Intervention:

Th: Are you willing to try something unusual which might make things more comfortable for you in your situation? (Nods agreement.) I feel strongly about your criticism trap. It's different and it probably won't make any sense to you. I am not going to explain it. What I would like you to do is to try it out a few times during the week and see what happens. Here is what you do. When your husband makes a criticism of your household or family duties I want you to pay him a quarter. Don't explain it. If he asks you anything, say I felt like it and walk away.

Cl: O.K., I'm willing to try it.

Session #6

Ms. G. returned the following week to proudly announce that she had not used any of her quarters but that she had also not received

any complaints from her husband. What did change was that for the first time in many months, they had spent several evenings talking to each other. During the week Ms. G. reported one headache that was not very intense. Her position had changed to one of optimism but the therapist advised her to keep her quarters handy in case the situation deteriorated.

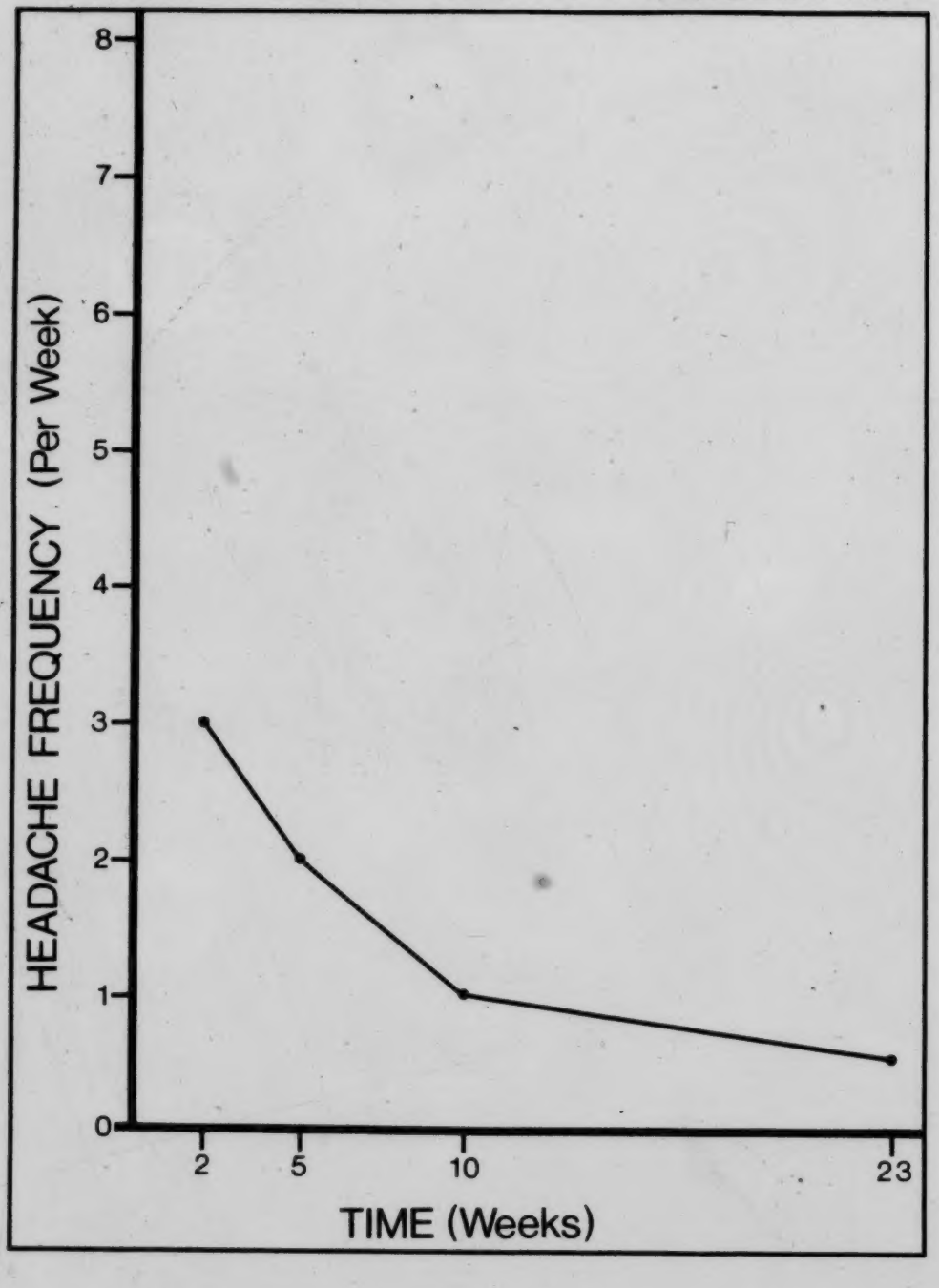
Session #7

When Ms. G. returned for her final treatment interview one month later, the changes she recounted in the previous session continued to be maintained. Her headaches had decreased in frequency and intensity. Her relationship with her daughter and her husband remained positive as Ms. G. felt she could handle most disruptions that might occur. On the basis of the evaluation criteria Ms. G. was considered to be in the success category.

Follow-Up Session

In the three months since the previous visit Ms. G. had continued to improve. She described herself as developing more independence and better able to handle situations that might bring on a headache. Among the additional changes she reported was obtaining a job one day a week outside the home, terminating treatment with her other therapist and reducing her dependence on medication when the occasional headache occurred. Ms. G. continued to be assessed in the success category.

HEADACHE FREQUENCY FOR SUBJECT #1



SUBJECT NO. 2

Session #1

Ms. L. was a graduate student in Science who had been experiencing weekly tension headaches for several years. They were most severe during periods of intense pressure. Ms. L. was preparing for some examinations in the near future and she anticipated getting severe headaches. Another personal crisis that had recently occurred was a separation from a man she had been living with for four years. She commented several times during the beginning of the interview, "I will be getting headaches every day during the next few weeks."

Intervention:

The therapist's position at this point was to accept Ms. L.'s assessment of the situation and encourage her to "Let her headaches happen."

Ms. L. described a situation in the previous year where she had successfully held off a headache during her entrance examinations so that it only developed after she had completed the last examination. She stated "I suspect I have some control over my headaches."

Since this was the intake interview the therapist asked Ms. L. to complete the Headache Record Chart (Appendix F) but with instructions to bring on as many headaches as possible in the next two weeks.

Cl: I have never tried it the other way around (i.e. to make them happen instead of holding them off). It seems so detrimental but I can try and see if it works.

Th: Well you can experiment with your theory of being able to control your headaches over the next two weeks.

Cl: I think it might be helpful to try it.

Session #2

When Ms. L. returned three weeks later (she had been unable to meet in week two) she was elated. For the two weeks following our initial interview she had experienced two headaches per week (with decreased intensity) and then during the third week they had totally disappeared.

Cl: I had been expecting more headaches and now I do not really know what to expect. I must be better able to cope with the stress.

The therapist's response was one of surprise and amazement at her doing this, but she congratulated Ms. L. on her obvious success.

Th: Did you at any time during those two weeks attempt to bring on your headaches?

Cl: Yes, I actually thought it would be a good idea not only for your study but for myself to see if I can face my problems. I thought about my problems, I dwelled on them, I even started crying a few times, but it did not work. I still did not get a headache.

Ms. L. acknowledged that something was different for her but expressed concern about the possibility of getting worse.

Intervention:

Th: When you change something, there is often a tendency to go back to old patterns. Sometimes a relapse occurs. What I suggest is when things are going really well and you cannot really believe it, test yourself. Do exactly what you did in the past - think about your problems and see if your headaches will come back.

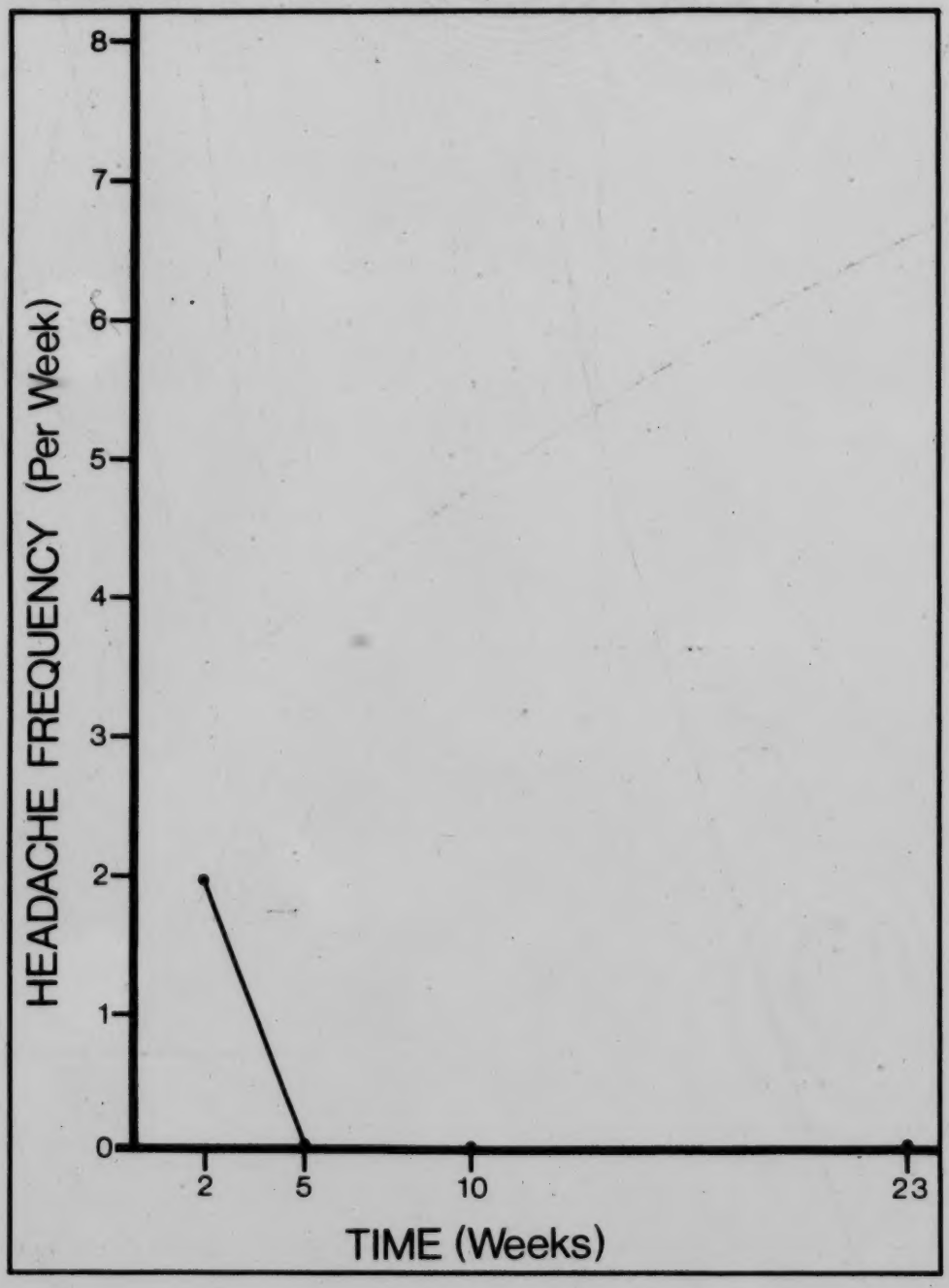
Session #3

Six weeks had passed since the last meeting and Ms. L. returned with continued enthusiasm. She had not had a headache for almost two months despite the fact that her pressure level at university was high and she had to adjust to living singly. She noted that she felt different inside and was able to cope with the major problems in her life, especially being alone. Ms. L. was classified in the success category at the end of the treatment period.

Follow-Up Session

Ms. L. had continued to be headache free during the follow-up period. No other significant changes had occurred in the intervening time. On the basis of her verbal self-reports and the data from her questionnaire Ms. L. was considered to have successfully resolved the presenting problem at the end of treatment and throughout the follow-up period and was therefore rated in the success category.

HEADACHE FREQUENCY FOR SUBJECT # 2



SUBJECT NO. 3

Session #1

Ms. R. was a longtime headache sufferer who came to the research study with a variety of psychosomatic symptoms. When she began treatment she was experiencing at least one headache every day. Sometimes the headache would subside and reappear later in the day but this was difficult to ascertain as she was using approximately 6 Tylenol per day plus an occasional Anaprox to control the pain. Her initial goal in treatment was to have some control over her headaches in terms of reducing both their frequency and intensity. Basically she had relied on medications to deal with her headaches.

Session #2

Ms. R.'s headaches appeared to coincide with her attempts to do everything possible to please others in family and work situations. Her boss frequently asked her to work overtime or to do secretarial jobs that were not her responsibility. She would work as much as 60 hours per week without compensation for overtime. Her pattern was to passively resign herself to the work situation until she got so dissatisfied that she would leave her job after about a year. When the therapist asked Ms. R. how life might be different if her headaches were significantly decreased she acknowledged that the transition would be difficult. Most of the differences she imagined would involve more recreation and more social contact. As Ms. R.

recounted the details of her personal life it became clear that she was extremely passive in almost every situation and allowed her family and colleagues to take advantage of her.

Intervention:

The therapist agreed with Ms. R. that change would indeed be difficult. A request was made of Ms. R. to consider the difficulties she would encounter if the changes she contemplated were to actually happen and cautioned her against making any changes during the next week. Her instructions were not to change anything in the next week but rather to keep doing things exactly as she had been.

Session #3

During the third meeting Ms. R. spoke of an ever increasing pressure to do more and more at work. She seemed especially dispirited and cried throughout much of the session. Her level of fatigue was increasing as she attempted to catch up with her work and comply with the requests made by her superiors. Everything in her life felt out of control. Her comment during our meeting was that if she had more control of her life she would have fewer headaches. When talking about changes in her life Ms. R. acknowledged that decreasing her headache frequency would certainly cause upheavals, especially in terms of structuring her time but that she still wanted to improve her situation.

Intervention:

During the week the therapist planned an intervention to disrupt Ms. R.'s pattern of compliance.

Th: I have something for you to do in the next week. What I want you to do is go to your boss, but not to ask for any kind of relief. This is what I want you to do. Go to your boss and tell him that you had 10 minutes during the last week at work when you did not have anything to do. Ask him for something to do to fill the 10 minutes.

Cl: Laughs--That will be very interesting.

Session #4

In the two weeks between meetings Ms. R. had made some radical changes although she did not follow the directive as given. When asked to type a letter she refused and decided to call a meeting with her boss to discuss what she wanted in terms of working hours and responsibilities. Ms. R. gave her boss a list of what she wanted to be different at work. This was the first time she had ever made a direct request for herself of a superior.

Intervention:

Th: I am concerned that you might make too many changes too quickly, causing a large upheaval in your life. You obviously have a lot planned. Take your time and go as slowly as you need to go to allow yourself to integrate each change as it occurs. Making

small changes slowly allows you to accommodate the changes you have already made.

Ms. R. noted that when she got something as requested at work there was an immediate difference in her headaches (i.e. a decrease in frequency and intensity).

Session #5

During this interview Ms. R. reported on the variety of changes she was making in her life. Among the tasks that she accomplished in the past two weeks were to have her 18-year-old daughter (who was not contributing to her own upkeep either financially or physically) to move out of the house, to write a proposal for a raise and to submit it to her boss, and to resume a favorite hobby, photography, in her leisure time.

Cl: If I change my lifestyle I can do something about my headaches. Things are changing for me.

The therapist once again congratulated her on the changes she had made on her own but cautioned her to continue to take her time.

Session #6

This was the final meeting in the treatment process. Not only had her headaches decreased to about three per week but the severity had also lessened so that Ms. R. was using about two Tylenol about three times per week. Her enthusiasm about her personal changes was obvious as she described how she had succeeded in obtaining a sizeable raise at work. Ms. R. commented that when she expressed her

displeasure directly to whoever was involved her whole attitude improved. The therapist credited her with making the changes she had made on her own. At the end of the 10 week treatment period Ms. R. was assessed as a success in terms of resolution of the presenting problem.

Follow-up Session

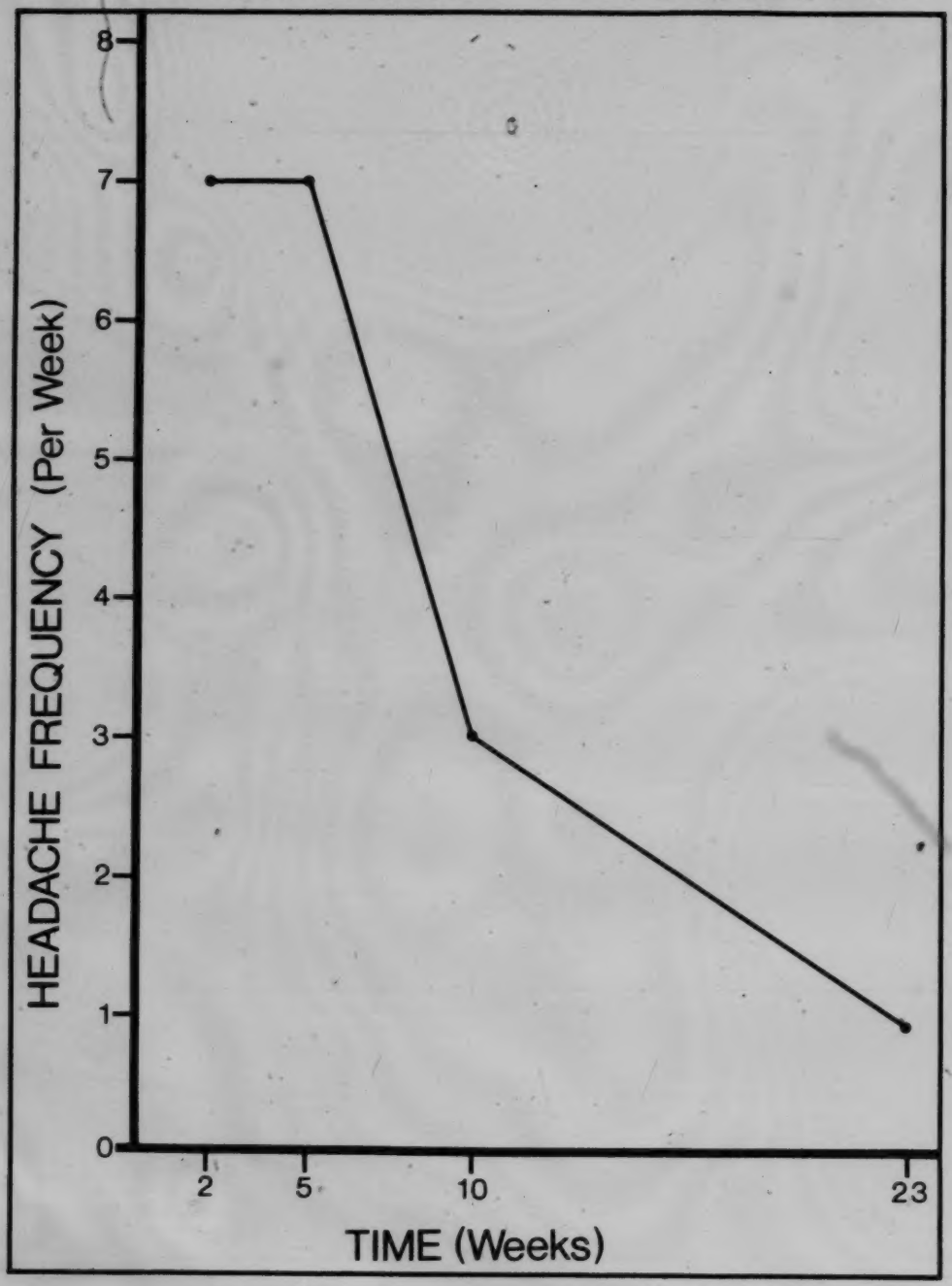
After three months, Ms. R. had decreased the frequency and intensity of her headaches from the original seven per week to one per week. When she did have a headache it was not nearly as intense as previously. Although some problems had occurred at work she reported being able to handle them on her own. On the basis of the evaluation criteria she was assessed as a success.

SUBJECT NO. 4

Session #1

At the initial meeting Mr. T. appeared eager to start treatment. When he was given the headache record chart he immediately wanted to know why there was a two week delay. The therapist explained that this information was part of the research data and could also be useful in treating his headaches. He conveyed the impression that he wanted a quick resolution of his symptom via some advice from the therapist.

HEADACHE FREQUENCY FOR SUBJECT # 3



Session #2

The data from his Headache Record Chart indicated that Saturday mornings were the time that Mr. T. always had one of his twice weekly headaches. The second one often came on Sunday, although occasionally a headache would occur during the middle of the week. Mr. T. was a successful professional who worked extremely hard during the week but when the weekends came he developed headaches. As he stated, "My headaches are almost like a transition to the task of relaxing". When asked about how his life would be different if he ceased to have headaches,he did not think there would be much change. His comment was that "life would carry on as it always has". The primary pattern that emerged was that a headache would inadvertently develop on the first day of a weekend or holiday when he allowed himself to sleep later than usual. When he was busy during the week and had no time to himself, he was usually able to avoid a headache.

Session #3

As Mr. T. was somewhat reticent to discuss anything but his headaches during each meeting, the therapist decided to give him an assignment to carry out over the following week.

Intervention:

Th: This coming Friday evening I want you to outline a structure for the activities that you must complete on Saturday during the

day. Set your alarm clock to the normal time you arise on a workday, get up and make sure you keep busy the whole day. On Sunday get up at the normal time and do not do anything or if you wish you can structure both Saturday and Sunday.

Session #4

When Mr. T. returned the following week he was conservatively delighted that he had not had a headache the previous Saturday. His comment was that he thought he now had some control over his headaches. The therapist maintained a position of skepticism, even suggesting that his headache might return the following Saturday. Because Mr. T. wanted to test out his new found ability to control his headaches he decided to return in two weeks with a further report on how he was progressing.

Session #5

Upon his return, Mr. T. reported that he had been headache free for 10 days. His usual Saturday headache only returned after a two week absence. When his time was highly structured Mr. T. did not have a headache: however, when he had an abundance of free time on the weekend he usually developed at least one headache.

Cl: When I am sitting and being bored that's when I tense up and get a headache. I am convinced if I learned to relax my tense muscles my headaches will disappear. I think exercise is the way to go.

Mr. T. had the expectation that he could completely eliminate his headaches if only he could just find the "right" way.

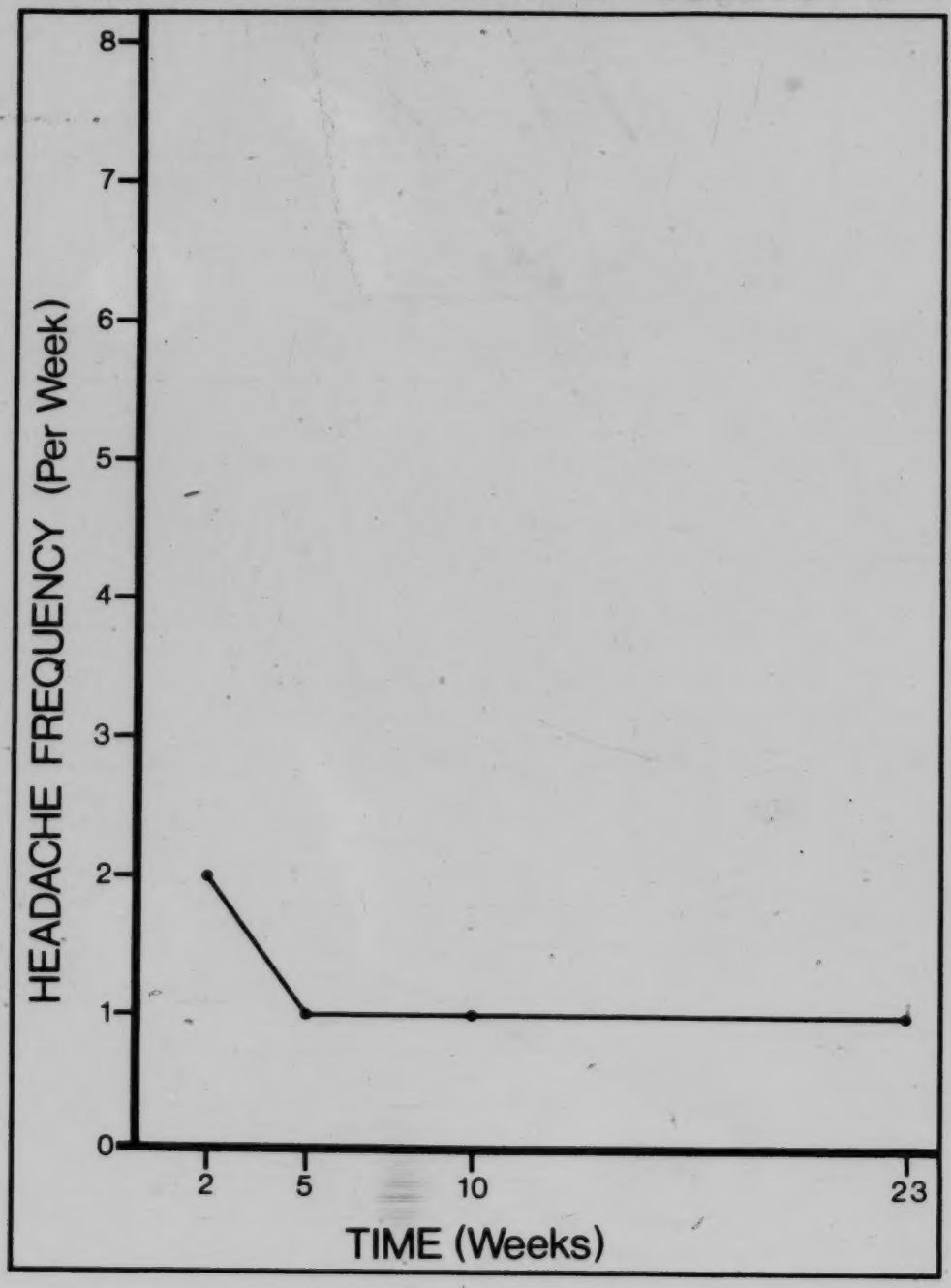
Session #6

The final interview produced some interesting yet puzzling results. An examination of his Headache Record Chart during the last three weeks showed that Mr. T. had had two headaches and only one headache on a weekend. When the therapist inquired if any change had occurred, Mr. T. responded that the frequency and severity of his headaches were unchanged as compared to the beginning of the treatment. As far as he was concerned his headaches were back to their normal pattern. Since the last meeting he had visited a physician who had used hypnosis to help him stop smoking. On the basis of the evaluation criteria, Mr. T. was assessed as a partial success.

Follow-Up Session

At the three month follow-up Mr. T. appeared to have maintained his changed headache pattern. He reported that his headaches were less severe and less frequent although he often had a mild headache on Saturday mornings. As Mr. T. reported that he had gained considerable but not complete control over his symptoms, he was once again assessed as a partial success.

HEADACHE FREQUENCY FOR SUBJECT # 4



SUBJECT NO. 5

Session #1

Ms. W.'s tension headaches began nine years ago, shortly after her marriage, and have continued on a twice weekly basis since that time. Until Ms. W. began treatment in the research project she had attempted to deal with headaches through the use of analgesics. Her family physician had attributed her headaches to the stresses of raising a family of four children. Her goal was to resolve some of the problems that bothered her so she would not have so many headaches.

Session #2

During the second meeting it became apparent that Ms. W. was extremely concerned about what people would think of her in social situations. She described how she would attend to the smallest detail when entertaining so that the visit would happen just perfectly. Ms. W. would expend a great deal of energy cooking and dressing to create a positive impression of herself. She acknowledged that she took the credit and the blame for how interactions went in social situations and when she relaxed after such an occasion, a tension headache would frequently occur. It was difficult for her to accept positions of authority, for example community club president, because she said she would spend all her time worrying whether people would think she had done a good job.

A second problem area for her was deciding whether or not to have more children. Although for practical reasons she did not want more than the four young children she already had, she was feeling guilty about not pleasing her husband who would like one more. The children were often noisy and this seemed to exacerbate her headaches when they did occur.

From the initial interview it appeared that Ms. W. had a clear sense of the relationship between her desire to please others both socially and familially and the occurrence of her headaches. When asked how life would be different if she did not have headaches, she cried and said she would have a closer relationship with others, especially her husband.

Initially it seemed that encouraging a shift in Ms. W.'s behavioral pattern would provide the first step in beginning the process of change. The therapist decided to ask Ms. W. to do something different in the next week.

Intervention:

Ms. W. had a party to attend the following Saturday and she was given the instruction to appear there with a slightly less than perfect appearance. Basically she was to dress as usual but to wear pigtails with ribbons at the party. She agreed to do this.

Session #3

When Ms. W. returned the following week she reported that she could not do anything so silly as requested by the therapist so she changed her appearance from a dress to wearing slacks.

Intervention:

The therapist's immediate response to this information was to apologize for asking Ms. W. to involve herself in anything so ridiculous and to take responsibility for making such a serious error.

Ms. W's decision to resist the previous week's intervention plus her comment in the previous interview that "I have never wanted to accept that I have tension headaches. I wanted the doctor to tell me that it was physical" strengthened the hypothesis that Ms. W. had difficulty in accepting responsibility for having her headaches and was demonstrating some resistance to changing. During this session Ms. W. continued to express her need to plan all aspects of her life carefully in order to make a good impression with others.

Intervention:

The therapist accepted Ms. W.'s view of her situation and agreed wholeheartedly that change would indeed not be advantageous. Ms. W. was further cautioned that changing might create more problems than she already had but no specific examples were given. When she left

the session Ms. W. said that she had begun to wonder whether all her planning and work could really control what others thought of her.

Session #4

Ms. W. reported no change in her twice weekly headaches for the past three weeks and indicated that her goal for change was to reduce her headaches to once or twice per month. A strategy was planned to extend her position even further than the position she had taken herself.

Intervention:

The therapist introduced the idea to Ms. W. that her problem had been discussed with an expert in interpersonal relationships, Dr. Sternberg,* and once again apologized for asking her to do anything differently. She was told that Dr. Sternberg agreed that the previous suggestion was a dumb thing to do on the therapist's part.

Th: I am not sure I even understand what he had to say but he said you would understand. This is what he said you ought to do the next week. I will give you the information. You are to pretend to be more concerned and take even more additional steps to make certain that people approve of everything you do. Consider these steps carefully and you might start thinking about them

*Dr. Sternberg was a fictional character.

immediately. Do whatever you need to do to gain approval from others. Neglect nothing.

Cl: I always thought I could not get much further. (Laughs.)

Session #5

When she returned the following week, Ms. W. presented some surprising changes. She had experienced an increase in her headaches so that she developed one every day, usually in the afternoon. When the therapist inquired about the intervention from the previous session she said that she could not see what more she could do to gain a favorable impression from others. She continued to express a desire to have a physician tell her that her headaches had a physical base so that she need not take any responsibility for them. Ms. W.'s concept of the situation was heavily anchored in medical mythology and this was taken into consideration when making the next intervention. The strategy was conceived of as a mental test similar to physical tests given when visiting a physician. The client's language was accepted as presented and language consistent with hers was used in framing the intervention.

Intervention:

The therapist asked Ms. W. if she would be interested in sacrificing a week of her time to learn something about headaches since she was already having them with increasing frequency. She agreed.

Th: Choose three days during the next week, perhaps Wednesday, Friday, and Monday to think about the problems in your life that make you worry and get tense. Select some time during the day and run these thoughts through your mind to see if you can intensify your headache while you are thinking of these stressful events. Pay attention to what emerges when you are resting. I have a hunch you can intensify your headaches.

There was some discussion at the end of the session whether these headaches would ever go away. A pessimistic position as to the possibility of improvement was maintained by the therapist.

Session #6

Ms. W. returned the following week with a surprising turn of events. Although she could not explain what had happened, she had had only one headache on a Thursday which was the day she had planned to have a headache. She looked happy and sounded enthusiastic about the changes that had taken place. Another difference was that she had decided that she really did give herself headaches when she worried about a problem. Her amazement over her ability to control her own headaches was evident.

Intervention:

Since Ms. W. had made a number of rapid changes over the course of the week, she was instructed to go slowly, as too rapid a change might be unwise. The therapist also suggested that she would probably have one headache in each of the following two weeks.

Session #7

Ms. W. reported three headaches in the first week following the previous session but none in the last week. During this interview Ms. W. continued to affirm a number of personal changes besides the decrease in the frequency of her headaches. These included a decision to seek a permanent method of birth control, a willingness to ask her husband for more time together alone, and choosing to do things like exercise or yoga to reduce the likelihood of becoming tense. The therapist congratulated her on her changes and told her that she could expect some headaches to occur as a part of the learning process.

Session #8

This session marked the end of treatment for Ms. W. and with it came the surprising news that she had been headache free for the past two weeks. She noted that: "I get at my problems faster now and make decisions about how to change them," but she predicted that she would have a headache from time to time in the future. Ms. W. was assessed to be a success in terms of the evaluation criteria.

Follow-Up Session

At the three month follow-up meeting Ms. W. reported a decrease in both frequency and intensity of her tension headaches. Other changes that occurred interpersonally were an increased sense of confidence and a realization that she could not please everybody. Ms. W. said that "Although I have headaches the odd time I can cope

with them so they are really not a problem any more." She was once again evaluated as in the success category during the follow-up meeting.

Subjects in Delayed Treatment Group

SUBJECT NO. 6

Session #1

Mr. R. was a university student who developed tension headaches in the previous year when he began attending college. Although he experienced three headaches per week for the last year he had never attempted to keep a record of their occurrence.

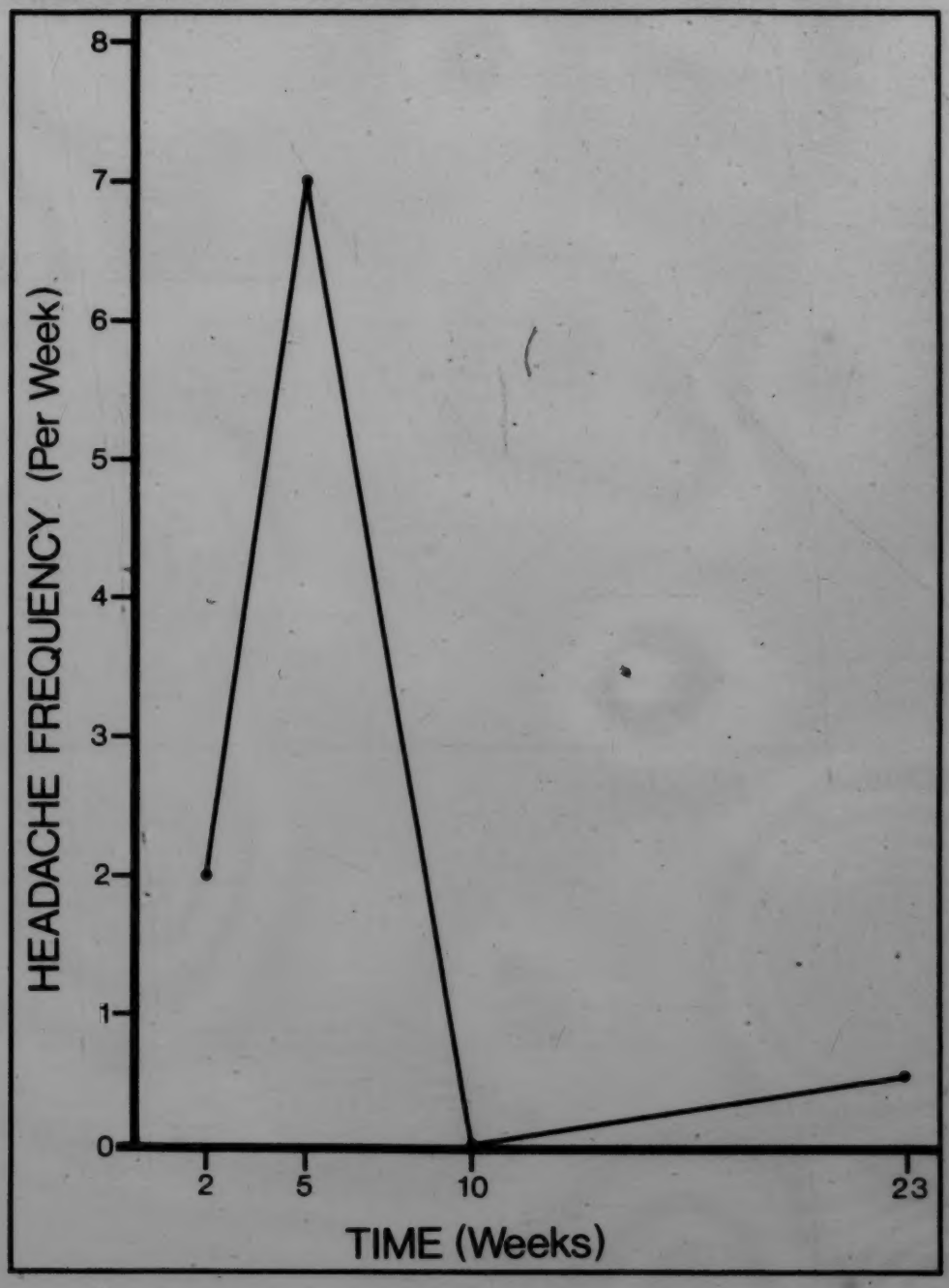
Intervention:

The therapist decided during the meeting to give Mr. R. the instruction to keep a headache record chart in such a way as to constitute a request to maintain his symptom.

Th: Do not do anything differently than you have been doing over the past year, continue to have your headaches as you always have and maintain a record of them for two weeks.

During the interview Mr. R. stated that his headaches were a problem because they prevented him from making contact in social situations as he often felt physically uncomfortable. He agreed to keep a record of his headaches and said that recently he had been thinking about what might cause them.

HEADACHE FREQUENCY FOR SUBJECT # 5



Session #2

At the second meeting thirteen weeks later, Mr. R. happily informed the therapist that he was no longer bothered by his headaches. The therapist expressed surprise and congratulated him on his success. He attributed the beginning of these changes to having to keep track and write down when and where his headaches occurred. While he was maintaining a record, he began talking to a few friends about his problems and discovered how he placed himself under pressure to be friendly and how this contributed to his headaches.

Cl: Just by doing this (i.e. Headache Record Chart, Appendix F) I learned about how I give myself headaches and how to relax myself by taking a short rest in the afternoon. I also took a drama course to learn to be more relaxed when speaking to others. The main thing for me was that I forced myself to slow down and consider what was going on. If I had not written down what I was doing when I had a headache I would not have considered what was happening to influence me to have one.

Since no further contact seemed necessary the therapist terminated treatment. Mr. R. reported being headache free for several weeks and in the last two weeks having had one very mild headache. The evidence presented by Mr. R. during the interview was consistent with the criteria for the success category as he was able to make changes in his behavior to control the symptom.

Follow-Up Session

Mr. R. was contacted at 23 weeks and continued to report the occasional mild headache. He was therefore evaluated in the success category using the evaluation criteria.

SUBJECT NO. 7

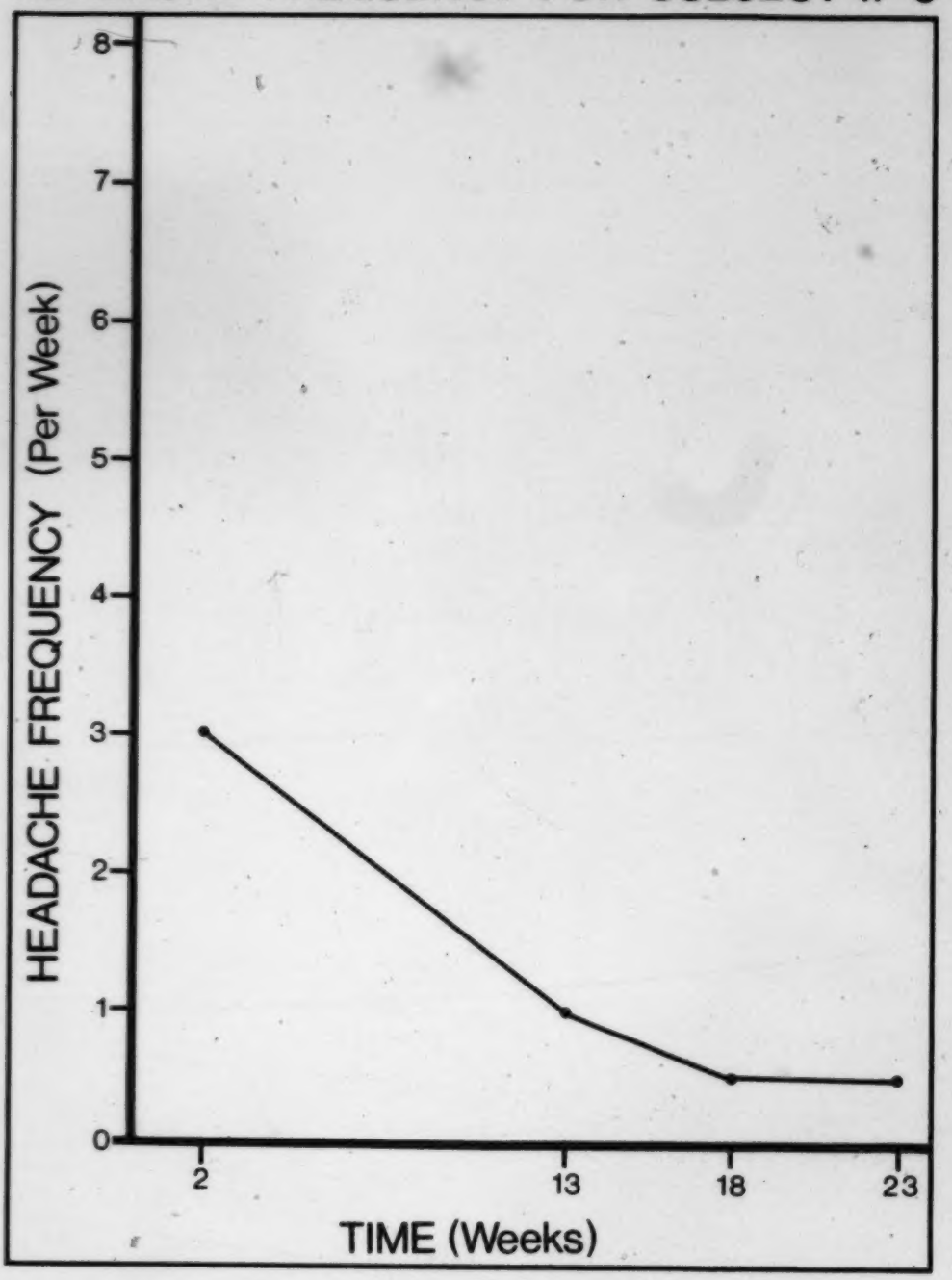
Session #1

Ms. B. had suffered tension headaches since early childhood. A variety of medications had been prescribed to her but she had discontinued using drugs for several years as she said they really did not help her. Her medical contact had involved several physicians including two neurologists, all of whom had failed to help her with her headaches. During the initial contact Ms. B. reported that she was seeking alternatives to medication for controlling her headaches.

Session #2

When Ms. B. came to this session she stated that she expected to learn ways to help her to relax. Her headaches began at age 4 and had continued to occur between three and four times a week since that time. Family conflict usually coincided with her headaches. Although her parents had separated recently, the frequency of her headaches had continued. Ms. B. reported that when something went wrong for her either at home or at work, she got upset but kept everything inside and then her headaches "just happened". She did

HEADACHE FREQUENCY FOR SUBJECT # 6



not believe that she had any control over them. The ability to develop some control over her headaches appeared to be an important area with which to start treatment.

Intervention:

The therapist's response to this situation was to encourage Ms. B. to plan to keep at least two but as many as four evenings available during the next week to have her headaches. The suggestion was made that Ms. B. plan to have her usual number of headaches on certain evenings of her own choosing. She was also to observe anything else that happened when her headaches occurred. Although she looked puzzled she agreed to follow the suggestion.

Session #3

When Ms. B. returned the following week she reported that nothing had really changed and that her attempt to have a headache the previous Thursday had been unsuccessful. She did manage to bring on her headaches on Saturday and Sunday. Her perception was that external events needed to happen to set off a headache. Although some small differences were made in the headache pattern, these were dismissed by the participant.

Intervention:

The therapist continued to encourage Ms. B. to experiment with trying to bring on at least two headaches the following week. Ms. B.

expressed some concern as to what would happen if she did not succeed in bringing on any headaches but once again agreed to follow the therapist's instructions.

Session #4

Ms. B. had attempted to have headaches on two days the following week but had not been able to have one on those days. She had only one at work that week whereas she usually had three. Success at not having a headache appeared to have confused Ms. B. The therapist congratulated her on the improvement she had made. When she was asked what difference did it make to her that she had done this, her comment was that "If I do this more often maybe I will not get any more headaches."

Intervention:

The therapist expressed concern about changing too fast and cautioned Ms. B. about eliminating her headaches without learning what she needed to learn in order to gain control over them.

Session #5

During the two weeks previous to this session some interesting changes occurred in Ms. B.'s headache pattern. For one week she experienced a decrease in her headaches' frequency and intensity for the first time in many years. The next week, however, they returned to their usual pattern of four headaches a week. She said that she had found it difficult to maintain the change. While some changes

had occurred these changes had not been lasting. One issue that was discussed was her Utopian goal of complete eradication of headaches. She thought this was probably not possible and so her goal became one of reducing the frequency from four to two headaches per week. During this session Ms. B. did acknowledge that some change had taken place over the intervening two weeks, but she remained pessimistic.

Intervention:

The therapist sided with her pessimism and forecasted that as she got older things would get worse and that she would probably have even more headaches. Unfortunately an external event intervened at this time to discontinue the meetings. Because of a city-wide bus strike which lasted six weeks, Ms. B. was unable to come to the university and so no further meetings took place. A follow-up to this last session was conducted by telephone.

Follow-Up Session

Ms. B. reported that she was having fewer headaches and that when they did occur they were less severe. Her strategy was to concentrate on controlling the tension in her life so she would not get headaches.

Generally she was feeling better and had become involved in activities outside the home. The therapist told her that she must have done it on her own and congratulated her for her success. Ms.

B. was evaluated as a partial success because while there was some improvement in headache frequency and intensity, the presenting probem was not satisfactorily resolved.

SUBJECT NO. 8

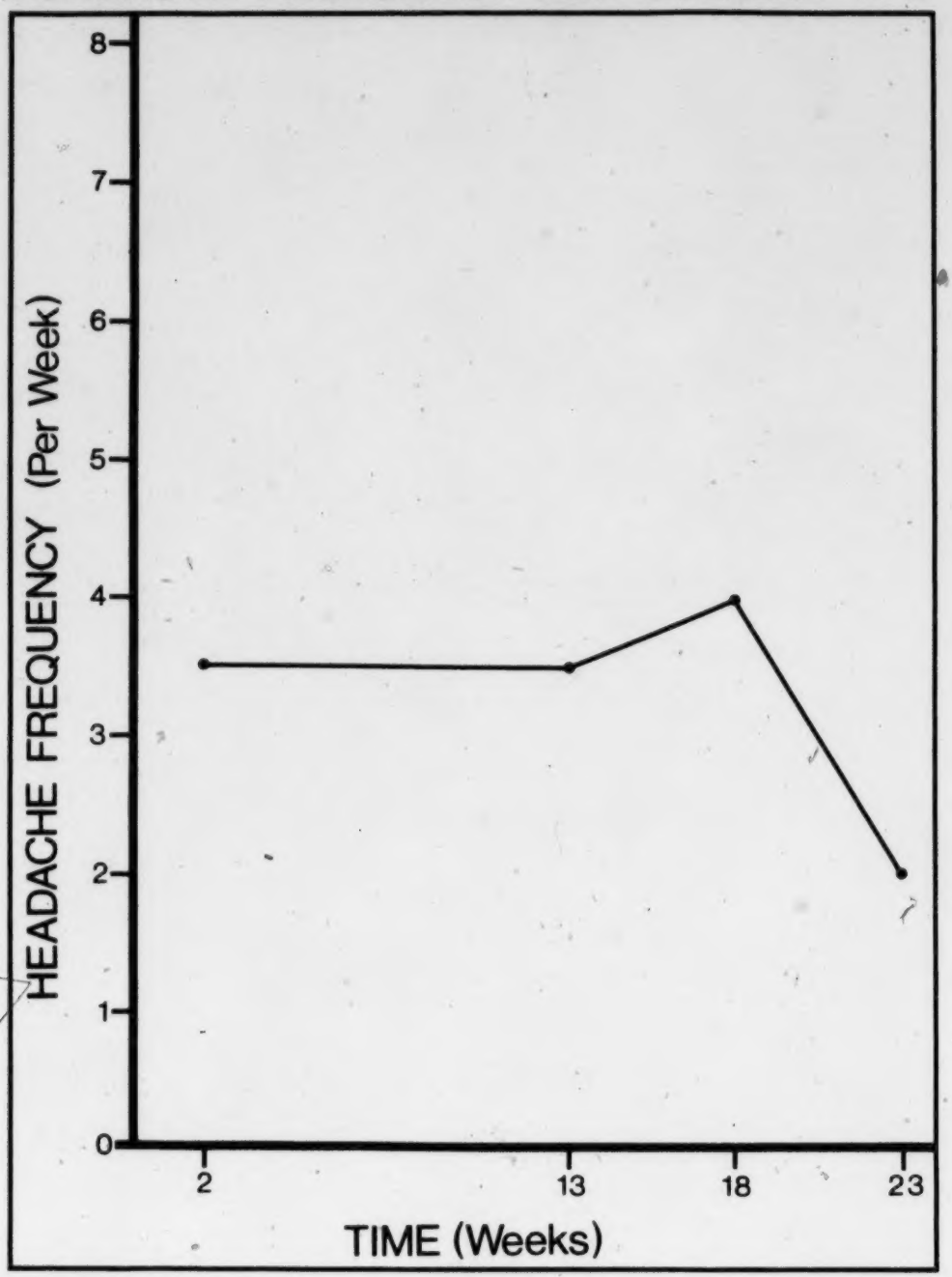
Session #1

Ms. D. was the second participant in the research study who had daily headaches. The data from her Headache Record Chart indicated that she was taking eight Tylenol per day as well as some Valium to help her control pain. The therapist's initial impression was that because of her headaches Ms. D. had little energy left to cope with her life. At the initial meeting she was placed in the Waiting for Treatment group and agreed to wait the 13 weeks to start treatment.

Session #2

When Ms. D. returned for treatment very little had changed in her life. Her headaches still occurred on a daily basis with the occasional headache-free day. For most of her adult life Ms. D. had been faced with the responsibilities of caring for her husband and eight children. Her family, however, had not been very sympathetic to her headaches so that she thought that they believed that her symptoms were not real. Her major complaint was that no one really listened to her. Even her family physician had told her husband to ignore her when she complained of having headaches. The therapist decided to accept Ms. D.'s initial position in regard to her headaches.

HEADACHE FREQUENCY FOR SUBJECT # 7



Intervention:

Th: Your headaches occur for good reason and they do exist. They are not to be dismissed casually. It seems that it is difficult for you to find other people who believe you. Considering the personal problems you have had with your family, it is surprising your headaches are not worse than they are.

Ms. D. was then asked to consider what changes she would like to make if her problems were to improve.

Session #3

During the third meeting Ms. D. outlined several goals she had for herself if she were to have fewer headaches. From the extent of the list, it became apparent that her objective was to be a better mother and to do more for her family than she was already doing. Her realization was that if she were to have fewer headaches she would receive even less help at home with the household chores than she was already getting now, and consequently she would have even less time to do things for herself.

Intervention:

Th: From my point of view if you were to have less headaches it seems that some things would be detrimental. As I review your list of goals it seems you would spend a lot more time doing things for other people. It would mean you would be extended even farther than you already are in terms of your responsibilities.

Cl: You are right to a certain extent.

Session #4

The therapist accepted the position that Ms. D.'s role in life was to be a wife, mother, and caretaker of other people. During this session Ms. D. reiterated her problems with her family and her desire to do a better job with them.

Intervention:

Th: It seems to me that you don't get the recognition that you deserve from your family. I know you are very committed to your family. You care for them and love them very much. A part of you would like to get some recognition and understanding from them. It might be painful that they don't acknowledge you. As a wife and mother there have been a lot of expectations on you to do a good job. I remember you saying you like to do things for yourself. I think you have to be careful of that, because your primary responsibility as a wife and mother is to fulfill your duties to the utmost. I want you to consider that unfortunately things may have to happen a little differently for you, that you may even have to get worse before you get the recognition from your family that you rightfully deserve. You may have to get worse before your family will really pay attention to you as a person.

Cl: But what if I don't want to do that?

Th: Let's wait until next week to discuss it.

Session #5:

Although there had been little change in the frequency of Ms. D.'s headaches thus far, during this meeting she reported a number of other changes in her life. These involved the pursuit of activities such as oil painting and genealogy. Ms. D. told the therapist that she wanted to prove that things could change without getting worse. The therapist adopted the position that Ms. D. might be changing too quickly and that perhaps she ought to slow down.

Session #6

Two weeks later Ms. D. reaffirmed that changes were continuing to occur in her life. She described a recent experience where she was able to tell herself to relax so that her headache went away. Her comment was that she felt able to cope with her headaches, and she reported that she had had only three headaches in the past week. The therapist maintained a position of caution, warning Ms. D. to go slowly.

Session #7

During this session Ms. D. moved the focus of her attention from herself to the difficulties she was having with her teen-age son. He had been truant from school, sitting around the house and being a nuisance. She had lectured him in an attempt to change his behavior especially when asking him for help around the house, but these

attempts had been unsuccessful. The therapist asked Ms. D. if she would be interested in a different approach.

Intervention:

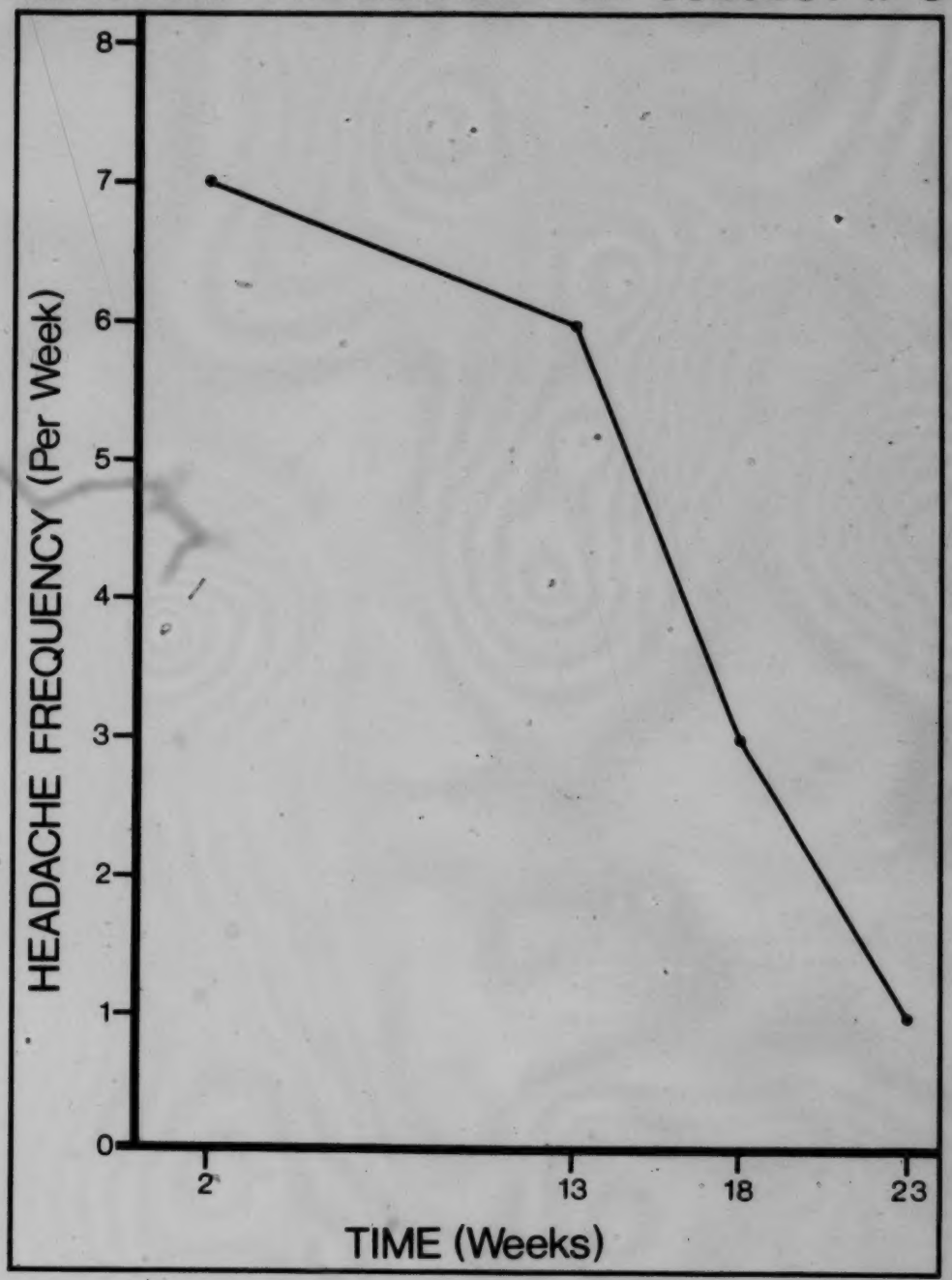
Th: I'm not going to explain how this works but rather I would like you to try it for a week and see what happens. This is between you and your son. What you need are some quarters. When you have something you want him to do, rather than giving him a lecture just ask him once. If he fails to do what you ask, give him a quarter and don't say anything more. If he asks what the quarter is for, tell him you felt like doing it.

Cl: OK, I'll do it for a week.

Session #8

At the conclusion of the treatment period Ms. D. continued to report changes in her headache symptoms. During the past two weeks she had had one headache each week. Other areas of her life had also improved, particularly her relationship with her son. Although he had not returned to school, he was being more helpful around the house and their disagreements seemed to have subsided. On the basis of the evaluation criteria Ms. D. was assessed in the success category.

HEADACHE FREQUENCY FOR SUBJECT # 8



CHAPTER V

DISCUSSION

Two major objectives of this study were to describe the strategies used in treating tension headache sufferers and to assess their impact on the change process in treatment. To accomplish this end, eight tension headache sufferers received individual psychotherapy utilizing strategic interventions as suggested by the change model. This chapter will begin with an account of the types of strategies used as well as a discussion of the relative success of these strategies with the participants' symptoms. Responses to the research question will then be presented, including an exploration of some of the major issues relative to the treatment mode. Finally, implications of the investigation for future research will be presented.

What Interventions Were Used?

Tension headache sufferers who participated in this research study presented their symptomatology in two basic ways: (1) Several viewed the headache as a symptom which was out of their control and which they wished to alleviate (Subjects 2, 4, 6, 7), and (2) a

second group perceived their symptoms within the context of their relationships and wanted solutions to these problems (Subjects 1, 3, 5, 8).

For the participants who wanted immediate symptom relief without consideration of their life situation, the most frequently used intervention was a prescriptive strategy which requested the participant to engage in or increase the frequency of the symptom. The intake interview was considered to be a treatment session, as the directive to maintain a record of headache activity for two weeks can be perceived as an indirect request for symptom scheduling. For example, Subject 2 was asked to bring on as many headaches as possible to experiment with gaining control of her headaches. Information given during the initial interview indicated that she was ready to follow a symptom prescription. When Subject 6 was requested to continue having headaches as usual, he was given an additional no-change directive. With Subject 2 and Subject 6 these interventions seemed to be all that was necessary to interrupt the headache cycle. Both of these individuals were able to eliminate their headache symptoms. When Subject 2 expressed some concern about maintaining the change she was invited to test herself by attempting to bring back her headaches. The request to relapse fortified her change process.

Both Subject 4 and Subject 7 were requested to modify the context within which the headache symptom occurred. While Subject 4 was asked to change his pattern of activity but to continue to have

his headache on Saturday as usual, Subject 7 was encouraged to plan to have her usual number of headaches on evenings of her own choosing but to carefully observe what happened. On each occasion the participants were able to bring about changes in their headache patterns. Both of these persons partially returned to their previous pattern after experiencing some improvement.

A common result of this strategy is the participant's discovery that the symptom is controlable. Secondly, the client's belief system remains intact as the individual is not instructed to stop having headaches but rather is encouraged to continue with the symptom. As all these participants clearly expressed a disinterest in anything but dealing with the symptom, this strategy offered a respectful way to begin intervening in the presenting problem without challenging the person's concept of reality.

For those subjects who perceived their headaches to exist within the context of their interpersonal relationships, prescriptive strategies were devised to promote a change in their attempted solutions. Subject 3 had tried harder and harder to please others. The instruction to request more work from her employer was a directive to extend behavior that was already occurring. Although in an interpersonal context, her behavior was being prescribed and to some extent exaggerated.

From the first interview it appeared that Subject 5 was preparing for a feared social event by perfecting it in advance. Her

noncompliance with the initial intervention dictated that the therapist take a one-down position and apologize for making an error. The introduction of a fictional expert in interpersonal relationships who agreed that the therapist was wrong further supported the client's resolve that she was right, in the hope that this would lessen her resistance to future directives. A strategy similar to the one used with Subject 3 was devised for Subject 5. Existing behavior was prescribed when the therapist requested that she do more of the same perfectly.

The unpredictability of the impact of these interventions was evident in the two examples. Although Subject 3 never completed the prescription, her headache frequency began decreasing in the week that followed. In Subject 5's case, her headaches increased dramatically which indirectly suggested that she had some responsibility for them. When a symptom prescription was given the following week Subject 5 was ready to follow the request. The directive to choose three days during the week to intensify headaches that were already occurring was also helpful in disrupting the headache pattern. The case of Subject 5 demonstrated a unique situation of a double symptom prescription initially at the interpersonal level and then subsequently at the symptom level. The impact of a particular symptom prescription was highly individualistic. Factors such as client readiness and therapist execution of the strategy seemed to influence the effectiveness of the intervention in disrupting the headache symptoms.

Reframing was sometimes used in preparing the client to comply with a future intervention or as a strategy to redefine the symptom as beneficial in a way not previously recognized by the client. Successful compliance with encouraging or prescribing a symptom frequently involved the adjunct use of reframing. One example that demonstrated this was the reframe of Subject 5's directive to intensify headaches within a medical framework. This was important to her as she wanted her symptoms to originate from a physical rather than a psychological perspective.

The strategies devised for Subject 1 and Subject 8 provide examples of redefining the symptom in a beneficial way. Subject 1 described herself as one who never asked for help, yet she was seeking treatment. When she was unable to foresee any dangers in alleviating her headache symptoms, the usefulness of her headaches in allowing her to seek treatment was then noted. In subsequent weeks her headache frequency began to diminish. The initial intervention with Subject 8 was to frame her headaches as a positive event that prevented her from overextending herself. Once the benefit of the symptom was established, Subject 8's position was extended even further. The therapist predicted that to enable her to obtain the attention she really deserved her symptoms might have to get even worse. The implication that she could make her headaches worse, supported the idea that she had an active part in the continuation of the symptom. Essentially this intervention was a variation of a prescribing strategy. Headache symptoms began decreasing following this intervention.

Once the process of change was initiated an important principle that was followed was the application of restraining strategies. The most commonly used strategy was to instruct the individual to slow down when a number of changes had occurred (Subjects 3, 5, 7, 8). Fisch et al. (1982) contend that with few exceptions this strategy should be used when improvement is reported. A relapse was prescribed with Subject 1 and Subject 2 when they expressed skepticism about a return of their symptoms. Another useful restraining strategy is asking the client to consider the dangers of improvement. With Subject 1 this intervention provided the setting to reframe the benefits of her symptom. Use of restraining strategies as change was initiated appeared to further enhance the improvement of headache symptoms.

In two particular instances a strategy adapted from Erickson (Haley, 1973) was used to interrupt an interpersonal deadlock. This intervention was utilized with Subject 1 to interrupt the criticism trap with her husband and with Subject 8 to obtain cooperation from her son with household duties. The strategy involves one person giving the second person a coin when the offending behavior happens. Fisch et al. (1982) refer to this type of intervention as a "jamming strategy".

Discussion of the Research Questions

Did the Treatment Strategies Promote Improvement?

If the goal of therapy is to influence the client to do something different to help overcome the symptom then the evidence in this research study strongly suggests that the strategies used were helpful in promoting improvement in headache sufferers' symptoms. Change was engendered from interventions which utilized and redirected the client's energies and behavior.

With several subjects the utilization of symptom prescription helped participants to experience control over an involuntary symptom without interpreting the purposes of the symptom. Following the directive to try to bring on her headaches, Subject 2 reported, "I had been expecting more headaches and now I do not really know what to expect,...I did not get a headache". Being instructed to keep a record of headaches for two weeks was enough to interrupt Subject 6's headache symptoms. He stated that "Just by doing this I learned how I give myself headaches and how to relax myself." Subject 4 responded less enthusiastically to his symptom scheduling but he commented "that I think I have some control over my headaches now". The initial response to the intervention by Subject 7 was that she had been unsuccessful; however, in the following week she had only one headache. In terms of outcome all these participants reduced or eliminated their headache symptoms in response to an intervention that involved a prescribing strategy.

A sequence of several strategies was helpful in treating Subject 1's headache symptoms. Reframing of her symptom as a legitimate way to seek help appeared to have a strong impact on her. Headache activity diminished from that point in treatment. A second intervention used to disrupt marital conflict assisted Subject 1 in decreasing the criticism she received from her husband and brought about a decided improvement in their relationship. Her headache frequency diminished from three per week to two per month at follow-up. An additional outcome that she reported was the termination of contact with her other therapist at the conclusion of the research treatment.

For Subject 8 the intervention which created an upheaval for her was the prediction that her condition would have to worsen if she expected to receive the attention she deserved. From that interview onward her headaches decreased in frequency and intensity and she began pursuing activities that satisfied her personal interests. A final intervention was aimed at disrupting the conflict with her son. The increased cooperation that appeared to result from this strategy changed Subject 8's perception of herself within her family. The most critical change was a decrease in headache frequency from seven to one per week.

One particular strategy which seemed to have a great deal of impact on Subject 3 was an intervention which directed her to ask for more of the same at work. From the meeting that followed until the conclusion of treatment she reported numerous changes in her

interpersonal behavior. She began making explicit demands at work and with her family. Interestingly her headaches continued to decrease during the follow-up period from an initial high of seven to one per week. Interventions were never directed toward her headaches specifically.

The only participant to receive interventions that were aimed at both interpersonal behavior patterns and at the symptom directly was Subject 5. The strategy that requested her to be even more perfect to gain approval of others created a change in headache frequency from the usual two per week to seven per week. The implicit message was clear; she had some responsibility for her symptoms. This was critical as she had resisted taking any responsibility for her headaches and this also prepared her to accept a direct symptom prescription. Following the suggestion to intensify her headaches, Subject 5 made a considerable shift in her behavior and reduced her headaches from two per week to two per month.

From the information presented in this discussion it would appear that participants were able to reduce or eliminate their headaches when receiving treatment involving strategic interventions. Many of the subjects reported positive changes in their life style and their interpersonal relationships. The use of a change model with its fund of interventions seems to have contributed to the improvement of the tension headache sufferer in this study.

Did Behavior Change When Headaches Diminished?

Viewed from a systemic perspective one would expect some change in behavior however unpredictable if and when a change occurs in an important aspect of a person's self definition such as the elimination of painful headaches. All subjects in this study reported a decrease in headache activity either as an initial change or following changes in their interpersonal relationships.

For those participants who reduced headache frequency by more than fifty percent (Subjects 2, 5 and 6) each reported changes in their interpersonal relationships. For Subject 2 there was an increased ability to handle living alone after the loss of a four year relationship. Changes for Subject 5 involved requesting attention from her husband directly and deciding to seek a permanent means of birth control. Subject 6 attributed his decrease in headache frequency to the act of maintaining a record of headache activity. He reported confidence in speaking in groups and improved academic performance.

Although Subject 4 and Subject 7 were rated as partial successes they both affirmed behavioral changes. Subject 4 had ceased smoking and Subject 7 confirmed that she had joined a drama group.

All subjects who reported a decrease in headache activity affirmed an accompanying change in interpersonal behavior. When changes did occur they were initiated spontaneously by the client either during or following treatment.

Did Headache Symptoms Change When Behavioral Changes Occurred?

Several participants defined the presenting problem in some other context than the actual headache symptom (Subjects 1, 3, and 8). During treatment no attempt was made to influence their headache symptoms by any specific intervention: rather strategies were devised to intervene in attempted solutions at the relational level.

Subject 3 reported changes at work in her relationship with her boss, more direct confrontation of family problems and an increase in the pursuit of leisure acivities. A progressive decrease in headache frequency, duration and intensity was also reported as these behavioral changes happened. By the conclusion of treatment her headaches had diminished to three per week, and they continued to decrease during the follow-up period.

Neither Subject 1 nor Subject 8 were asked to change any behaviors. The intervention used in both situations was a comment on the importance of the symptom to the individual's interpersonal relationships. The changes that accompanied these interventions were improved family relationships and a subsequent decrease in headache activity.

Haley's (1976) conceptual framework which describes headaches as an analogic tool to express a statement about the individual's interpersonal system seems to fit well for these three individuals. In all three cases, the subjects (Subjects 1, 3, 8) demonstrated a remarkable decrease in headache activity once the individuals perceived changes in their interactional patterns.

Did New Problems or Symptoms Arise?

A basic tenet of psychoanalytic theory is that symptom removal must lead to symptom displacement and a worsening of the unresolved underlying problem. If one conceives of the headache symptom as a long standing attempted solution that is no longer effective, then from a change model perspective, resolution could allow spontaneous new solutions to difficulties. If therapy successfully introduces an intervention to change the rules of the system, the system can reorganize itself.

On the basis of the information presented during the follow-up interviews none of the participants reported developing any new symptoms. Several subjects reported being able to handle new but current difficulties since discontinuing treatment (Subjects 1, 3 and 5). One physical problem did arise for Subject 3 in that when she reduced her medication due to a decrease in headache symptoms, she discovered that she had arthritis. She subsequently received medical attention for this problem. The results from the five individuals who were followed for three months after treatment lends some support to the conclusion that a decrease in headache symptoms does not lead to new problems or symptom substitution.

Are Changes Maintained Over Time?

One of the criticisms frequently leveled at the change model is that because it is so brief, improvement cannot possibly be long lasting. The assumption that is usually made is that change of any

great magnitude must come about as a result of deep and lengthy therapy. Erickson (Haley, 1973) has presented numerous case examples where long standing problems are overcome in a brief period and are maintained over time.

The data gathered in this study suggest not only that headache symptoms were reduced to be no longer considered a problem in four of the five treatment subjects, but also that these individuals continued to resolve problems in other spheres of their life without the return of the symptom. The number of treatment sessions did not appear to be related to the outcome. Subject 4 who was evaluated as a partial success, reported the least change of all the participants, but the reduction of headache symptoms that did occur was maintained over the follow-up period.

Despite the small clinical sample there does appear to be evidence to indicate that when change occurred in the presenting problem either symptomatically or behaviorally, this improvement was maintained at the follow-up evaluation.

Limitations

Interventions

The application of the theoretical aspects of the change model particularly its interventions, is much more complex than one is led to believe by reading the literature. Utilization of the strategies requires an accurate understanding of the person's concept of reality

and the creativity to make the intervention effective. At first exposure to the model there is little information communicated that indicates how to pace and time the delivery of the intervention. These aspects are highly relevant to the effectiveness of the strategy and would likely limit the usefulness of the model without careful attention to timing and to delivery.

Observations of effective practitioners of the change model strategies give one the impression that many potent strategies are developed in the analogic mode rather than the digital mode of thinking. Teaching a therapist to function in this fashion is a difficult task. This aspect of the research process was a difficult one for this investigator, because although a few general guidelines exist for the development of specific interventions, many of the strategies had to be spontaneously evolved during treatment. Systematic investigation of strategies are limited under controlled conditions and probably cannot be researched with high internal validity because of the unpredictability of the process of treatment.

Relationships

A serious shortcoming of this model is its failure to address the issue of the relationship between the therapist and client during treatment. To develop a therapeutic model which emphasizes the human interaction without considering this aspect in therapy relationships is mystifying. "The brevity of treatment and the problem-solving approach leave little room for 'developing a relationship' between

therapist and patient" (Fisch et al., 1982, p. 176). To ignore the impact of the relational context of therapy is to omit a crucial factor in the treatment process, no matter what the time limit.

Palazzoli and her colleagues (1978) apply the concepts of symmetry and complementarity in assessing the transactions of dysfunctional families, occasionally making use of these concepts in developing strategies that consider the role of the therapist's relationship within the treatment process. One might expect that the therapist would be a target for the client's dysfunctional interpersonal patterns.

It is this researcher's impression that one of the reasons for the failure of some strategies to promote change was related to the therapist's inability to comprehend the client's reality and to match it appropriately. Furthermore, a potentially successful strategy may have been ineffective if the therapist failed to assess the relational style accurately and respond so that the client perceived himself to be understood at both a verbal and nonverbal level.

A relationship seemed to exist between successful outcomes and the therapist's intuition that a sense of comfort existed in the treatment process for both therapist and client. This perception is not based on any verbal communications from clients but rather it is solely an impressionistic one. Although failures may be partially accounted for by the therapist's inability to accurately comprehend the client's system, other factors must be considered. The client comes to treatment with a rigid response pattern. The therapist must

have a greater degree of flexibility in his response pattern than the client, or they will be hopelessly deadlocked in their communications. Sometimes the therapist is not successful in being more flexibile than the client and consequently becomes trapped. This process appears to be an important one in the effectiveness of strategic inteventions.

Client Resistance to Change

Is it possible for an individual to become addicted to a pattern of relating and consequently resist change? Nothing is really said about the limits of the change model in treating certain clients. From this investigator's perspective it appears that addiction can be a powerful motivator in the treatment process.

At times it was difficult to ascertain whether the client maintained an interactional pattern because of a commitment to the attempted solution or because the therapist was unable to match the client's interpersonal style. During treatment the therapist had the impression that Subject 4 did not perceive his world view to be well understood partially because the therapist failed to pace, match and interact with the client adequately. This failure by the therapist may have contributed to increasing the client's resistance to change.

If the headache sufferers' relationships are conceived of as an addictive pattern, then it is possible to understand how strategies within the change model can fail to promote change. With some participants maintaining a pattern of headaches continued to be an

important aspect of their style of relating to others. The implications of giving up their headaches completely could strengthen their resolve to remain unchanged despite their experiencing improvement. The change model provides some effective strategies to promote change, but it does not address the issue of those individuals who are addicted to staying the same. Headaches can continue to be an attempted solution which the client is unwilling to give up totally.

Shift in Context

Two participants in this study demonstrated the necessity of devising interventions to facilitate a shift in interpersonal context once changes are made in the symptom. As the symptom begins to improve, a client can be drawn back to old patterns with family, friends and colleagues.

Some of the failures of this model can be attributed to interventions which promote rapid change symptomatically but fail to assist in changing interpersonal contexts. Rarely is this issue addressed directly and it appears to be crucial in the continued maintenance of symptom improvement.

Therapist as Researcher

From an empirical perspective the role of researcher and therapist of necessity must be separated in order to guarantee objectivity in the gathering and evaluation of data. Empirical epistemology assumes that observation, measurement, and prediction

can be made about the external world without influencing or changing it. Scientific objectivity rests on the premise that an external world exists outside of the observer. A need exists to have several observers agree upon the nature of the observation. To be valid at least more than one person must confirm that a particular intervention is labelled in the same way. This process then guarantees that the data are objectively gathered and analyzed. Adherents to the empirical position would argue that the data gathered in this study are not "objectively" quantified.

This study, however, was not conceived using assumptions from an empirical epistemology, but rather the research was conducted using some of the premises delineated in the systemic tradition. In contrast to the position of objectivity where the properties of the observer are not considered to enter into the description of the observations; the systemic position assumes that the observations constructed by the researcher are relative to the cognitive domain of the knower (Maturana & Varela, 1975) and therefore descriptions of observations reveal the properties of the observer. Furthermore since cybernetic or systemic epistemology is concerned with rules of operation that govern pattern and relationships it is not possible for the observer to observe reality without influencing it.

Observation is the realization of a series of operations that encompasses an observer as a system with characteristics that allow him or her to perform these specific operations. Consequently specifying the operations that can be performed determines the

observers domain of possible observations (Maturana & Varela, 1975). The researcher is considered to be an important part of the data analysis whose influence need not be excluded from the study.

Implications for Research

The current investigation demonstrated some of the possible applications of strategic interventions in the treatment of tension headache sufferers. The observations and outcomes of this study are specific to the particular sample and to the researcher. The findings do offer some tentative support for the usefulness of the change model in treating clinical problems of a psychosomatic nature.

During the course of this research study it became clear that the simultaneous investigation of the treatment process and the outcome could provide meaningful information for the practitioner. Both types of data are necessary in clinical research. The research interview allowed enough latitude so that it could approximate the actual clinical interview without inhibiting the data gathering process. If the treatment strategies had been standardized across subjects much of the effectiveness of this model would have been lost. Horan (1980) refers to the three myths in psychotherapy outcome studies using true experimental designs. His position is that treatments are not appropriate to clinical problems, that treatments are not deployed as purported and that random assignment to groups does not provide groups with problems of an equal nature.

The variation in the problem definition and the complexity of treatment planning is evident with the participants in this study.

Research of this nature allows for unexpected outcomes as well as for what is being investigated more directly. There were many opportunities to devise unique interventions that do not appear in the literature. The whole area of assessing the impact of strategic interventions merits further investigation. Although the question may arise whether or not the next logical step is to attempt to use true experimental design to research the change model, given Horan's arguments on the futility of this approach in psychotherapy outcome research, it appears to this investigator that greater sophistication and refinement of the modified case study would produce more relevant data on the application of the change model.

The present research has been limited by the systems model used to conceptualize the problem and devise strategies for change. A possibility for future research could be the use of newly evolving systems models which are appearing in the literature (Jantsch, 1980; Maturana & Varela, 1975). As new theoretical models develop in systems approaches to human behavior, different and possibly more effective ways of resolving clinical problems could be investigated.

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APPENDIX A

HEADACHE RESEARCH PROJECT

Appendix A

HEADACHE RESEARCH PROJECT

Do you experience frequent tension headaches?

Would you like more control of your headaches?

Would you be willing to participate in a treatment that uses no medication?

Individuals 18 years of age and over are invited to register for a research project following a counselling approach to enable you to gain greater control of your tension headaches.

Medical approval will be required for participants to be involved. Because this is an experimental program the number of participants will be limited. Those selected will be requested to commit one hour per week for a maximum of 10 weeks. There is NO FEE for the program.

For further information please call:

Barbara Paulson
Department of Educational Psychology
University of Alberta
432-5207, 9:00 - 12:00 noon

Gateway, September 15, 1981

Westend and North Examiner, September 23, 1981

Folio, September 24, 1981

APPENDIX B

SCREENING PROCEDURE

Appendix B

SCREENING PROCEDURE

Hello, this is Barbara Paulson. I received your name in the mail as an interested participant in my tension headache research project. I would like to ask you some questions about your headaches before I can tell you whether you will be selected for the research project. Are you able to talk now or would you like me to call back?

I want to make it clear that this is a research project for my doctoral dissertation. I am using a method that has been successful with a large number of problems but to my knowledge has not been tried systematically with tension headache sufferers.

To find out whether you have the type of headache to participate in the program, I have a few questions to ask.

Screening Questions

Name: _____ Date: _____

1) How long have you been having headaches? _____

2) Would you say your headaches tend to start gradually or do they tend to have a more abrupt or sudden onset? _____

_____

3) What area of your head does the pain occur? _____

_____

4) Does the pain occur more on one side or both sides of your head?

_____

5) About how many headaches do you have per month? _____

_____

6) How would you describe the pain? _____

7) Do you have any signs that you are about to have a headache?

_____

8) Have you seen a physician regarding your headaches? _____

9) Has your physician led you to understand that there are no apparent physical causes for your headaches? _____

10) Are you taking any medication for your headaches? _____

_____

11) Would you be willing to give me a written statement from your doctor that your head pain is due to tension headaches? (I will provide a form letter.) _____

12) Would you also be willing to give me written permission to include anonymous information about yourself for my research?

_____

Thank-you for answering these questions.

If the person does not meet the criteria for inclusion, he or she is thanked for his or her interest and told they cannot be accepted into the research project. If the person does meet the criteria for inclusion, he or she is invited to an intake interview with the following rationale.

I have an interest in helping people to gain more control of their tension headaches and I need your help in learning how to do that. I am willing to help you with your problem and I really need

your help with my problem. In terms of the program, I want two main things from you. I would like your commitment to attend the sessions. I would also like you to fill out two record sheets at the beginning and end of the project as well two questionnaires at the completion of the project. Would you agree to do that? If you have any doubts about participating please let me know now. Arrangements for an intake interview are then made.

APPENDIX C

MEDICAL FORM

Appendix C

MEDICAL FORM

Name of Physician: _____

Address: _____

Name of Patient: _____

Date of Birth: _____

Address: _____

Phone Number: _____

The above named patient has volunteered to participate in a treatment program for tension headache sufferers being conducted at the University of Alberta, Department of Educational Psychology. This research is being supervised by Dr. Allen Vander Well. The treatment will involve a counselling approach to help the patient reduce the frequency of tension headaches.

We are requesting that all patients obtain the signature of their physician to verify that there is no medical reason why they should not participate in the research project.

TO THE PHYSICIAN:

A.) This is to certify that _____ has no medical reason for not participating in the research program described.

B.) I _____ (do, do not) agree that the head pain which this person reports is of the tension headache form.

SIGNATURE: _____ DATE: _____

APPENDIX D

RESEARCH PERMISSION FORM

Appendix D

RESEARCH PERMISSION FORM

In connection with the treatment and research program in which I am participating, I consent that the interview sessions involving myself may be observed by professional personnel directly connected with the research project. I also consent that audio tape recordings may be made of these sessions.

All information obtained by participating in this program will be kept confidential in accordance with good research ethics. Strict precautions will be taken to exclude personally identifying information from verbal and written statements.

I give my permission to Barbara Paulson to use the information obtained during this program for research purposes, including use for the dissertation and subsequent professional research articles.

_____

(Signature)

_____

(Date)

APPENDIX E

INTAKE FORM

Appendix E

INTAKE FORM

A. Counsellor: _____ Date: _____

Name: _____ Age: _____

Occupation: _____ Marital Status: _____

Home Address: _____ Home Phone: _____

Work Address: _____ Work Phone: _____

Spouse's Name: _____ Age: _____

Occupation: _____

Home Address: _____ Home Phone: _____

Work Address: _____ Work Phone: _____

Children: Name: _____ Age: _____

Name: _____ Age: _____

Name: _____ Age: _____

B. Headache Characteristics:

Which of the following characteristics would describe your type of headache? Check only those that apply:

1) Headaches start gradually _____

2) Pain occurs at back and/or front of head _____

3) Pain occurs on both sides of head _____

4) Headaches occur at least once per week _____

5) Pain is slow and steady _____

6) Headaches only occur during menstrual cycle _____

7) Headaches are preceded by vomiting or nausea _____

8) Head pain will disappear suddenly _____

APPENDIX F

HEADACHE RECORD CHART

Appendix F

HEADACHE RECORD CHART

Day/Date	Time of Onset	Severity	Location of Pain	Events Preceding Onset	Drugs (Dose)	Other Actions Taken	Degree of Relief	Time of Maximum Relief
MON.								
TUES.								
WED.								
THURS.								
FRI.								
SAT.								
SUN.								

Severity

0-No headache
1-Annoying
2-Troublesome
3-Moderately severe
4-Quite severe
5-Incapacitating

Degree of Relief (Examples)

Slight
Moderate
Complete

Saper & Magee (1981)

APPENDIX G

QUESTIONNAIRE ONE

Name _____

Appendix G

QUESTIONNAIRE ONE

1. How would you describe the frequency of your headaches as compared to four months ago?

   Less Frequent _____

   Same _____

   More Frequent _____

2. How would you describe the severity?

   Less _____

   Same _____

   More _____

   Are there any other changes you can think of in terms of your headaches? Yes _____, No _____

   If changes, please describe how they are different.

3. Have you noticed any changes in any other areas of your life?

   Yes _____, No _____

   If so please explain:

   A) Sleeping Habits: _____

   B) Eating Habits: _____

   C) Work: _____

   D) Recreation and Exercise: _____

E) Family Relationships: _____

F) Friendships: _____

G) Medications Taken: _____

H) Other: _____

4. Have any new problems occurred in your life in the past four months? Yes _____, No _____

If yes, please describe.

5. Since your last session have you succeeded in dealing with any new problems on your own? Yes _____, No _____. Please describe.

6. Have you sought any other forms of treatments for your headaches since your last meeting with me? Yes _____, No _____.

If yes, please describe.

7. Any additional comments you may wish to make would be welcomed.

APPENDIX H

QUESTIONNAIRE TWO

Name _____

Appendix H

QUESTIONNAIRE TWO

1. How would you describe the frequency of your headaches as compared to four months ago?

   Less Frequent _____

   Same _____

   More Frequent _____

2. How would you describe the severity?

   Less _____

   Same _____

   More _____

   Are there any other changes you can think of in terms of your headaches? Yes _____, No _____

   If changes, please describe how they are different.

3. Have you noticed any changes in any other areas of your life?

   Yes _____, No _____

   If so please explain:

   A) Sleeping Habits: _____

   B) Eating Habits: _____

   C) Work: _____

   D) Recreation and Exercise: _____

E) Family Relationships: _____

F) Friendships: _____

G) Medications Taken: _____

H) Other: _____

4. Have any new problems occurred in your life in the past four months? Yes _____, No _____

If yes, please describe.

5. Since your last session have you succeeded in dealing with any new problems on your own? Yes _____, No _____. Please describe.

6. Have you sought any other forms of treatments for your headaches since your last meeting with me? Yes _____, No _____.

If yes, please describe.

7. Any additional comments you may wish to make would be welcomed.

APPENDIX I

FORM LETTER

APPENDIX I

February 10, 1982

Dear

This is a reminder of our follow-up meeting to complete your participation in the headache research study. I would like to see you on March 16, 1982 at to find out how you have been doing these last few months.

If the time I suggested is not suitable please contact me at 432-5205 to make other arrangements.

Sincerely,

Barbara Paulson